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Imperfect(ive) variation: The case of Bulgarian

María Luisa Rivero^{a,*}, Nikolay Slavkov^{b,1}

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^a University of Ottawa, Department of Linguistics, 70 Laurier Avenue East, Room 417, Ottawa, Ontario K1N 6N5, Canada^b University of Ottawa, Official Languages and Bilingualism Institute (OLBI), 70 Laurier Avenue East, Room 130, Ottawa, Ontario K1N 6N5, Canada

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Abstract

This paper explores the connection between morphological and semantic imperfectivity in Bulgarian from a comparative perspective set against the framework of situation semantics. Stressing the characteristics of Bulgarian, we juxtapose the uniquely complex Tense-Aspect-Modality-Evidentiality (TAME) system of this language with those in other Slavic languages and in Romance with regards to variation in (un)availability of a large variety of readings of imperfectives, including habitual, ongoing, intentional, and factual types. Bulgarian is interesting as it lacks some imperfective readings characteristic of Russian and Polish, such as the factual type specialized for complete events, and displays intentional imperfectives, which are commonly found in Romance but restricted or absent elsewhere in Slavic. We adopt the idea that imperfectives share a modal architecture where an imperfective operator IMPF with an intrinsic semantic core is subject to different restrictions on its domain of quantification based on specific grammaticalization patterns across languages. From this perspective, we also examine the interaction between IMPF and an evidential operator encoded by the so-called Renarrated Mood in Bulgarian, proposing that the latter scopes over IMPF adding an evidential flavor to available imperfective readings; we establish contrasts with so-called Narrative Imperfects in Romance, which also serve a reportative function.

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1. Introduction

The goal of this paper is to seek a deeper understanding of the characteristics of imperfectivity in Bulgarian from a comparative perspective, borrowing the framework of situation semantics in [Rivero and Arregui \(2010\)](#) and [Arregui et al. \(2014\)](#) (see also [Bonomi, 1997](#); [Cipria and Roberts, 2000](#); [Deo, 2009](#) for related approaches).

It is well known that the languages of the world offer variation along multiple morphological, syntactic, and semantic dimensions concerning categories of the imperfective type. On the one hand, semantic notions of imperfectivity can be lexically encoded in different morpho-syntactic categories, and/or compositionally realized by combinations of tense inflections, derivational affixes, and auxiliaries. On the other hand, morpho-syntactic imperfective categories may be multiply ambiguous, thus yielding a rich variety of readings, a well-known situation in Slavic and Romance. Interested in the consequences for Universal Grammar of the different dimensions of imperfective variation, in this paper we are concerned with the characteristics of Bulgarian, and the considerable picture of variation that arises when this language is compared to other languages in the Slavic family or the Romance family.

* Corresponding author. Tel.: +1 613 562 5800x1776; fax: +1 613 562 5141.

E-mail addresses: mrivero@uottawa.ca (M.L. Rivero), nslavkov@uottawa.ca (N. Slavkov).

¹ Tel.: +1 613 562 5743; fax: +1 613 562 5126.

Bulgarian appears to hold a privileged position in a program that seeks a deeper understanding of general characteristics in imperfectivity. On the one hand, Bulgarian embodies morphological properties viewed as prototypical of the Slavic family, in particular a distinction between so-called perfective and imperfective verbs that may be morphologically encoded in verb stems, and a very rich and productive distinction between so-called primary and secondary imperfective verbs. At the same time, Bulgarian also embodies morpho-syntactic properties often viewed as prototypical of Romance, such as formal distinctions between tenses that involve aspectual dimensions, which in the Indicative mood include aorist, imperfect as well as present and past perfects. A third dimension that makes Bulgarian particularly challenging in a study of imperfectivity is its Renarrated or Evidential mood, with verb forms that also encode aspectual distinctions. This mood is, roughly, for indirect evidence, and distinguishes Bulgarian from most Slavic languages and from the Romance languages. Such a richness of characteristics all involving aspectual distinctions opens challenging windows when seeking to reach a deeper understanding of semantic imperfectivity and cross-linguistic variation in imperfective readings.

In addressing traditional and new concerns in Slavic and Romance philology and linguistics, we explore some of the intricacies of two distinct morphological systems that encode aspectual dimensions in Bulgarian: tense inflection morphology vs. perfective/imperfective stem morphology. In so doing, we identify previously unnoticed differences between Bulgarian and members of the Slavic family, and both similarities and differences with the Romance family.

Within the general tenets of Rivero and Arregui (2010) and Arregui et al. (2014), we roughly distinguish between the two kinds of aspect known as Viewpoint and Situation (Smith, 1991) (with differences mentioned in passing later). We adopt the idea that semantic imperfectivity is encoded in Viewpoint Aspect, and resides in an Imperfective operator IMPF with modal characteristics. We draw on the view that IMPF displays an invariant semantic core and is not an empty or unmarked semantic category.² However, IMPF may associate with different restrictions on its domain of quantification (i.e. formal accessibility relations) that need not be identical in all languages, and this is where crosslinguistic differences in imperfective readings reside. Our interest in this paper, then, is mainly on Viewpoint aspect, and while we discuss effects of Situation/Lexical aspect on Viewpoint, we do not analyze them in detail.

The paper is organized as follows. In section 1.1 we briefly mention some features of the Bulgarian Tense-Aspect-Modality-Evidentiality system, which prove important to the aims of this paper. In section 1.2 we introduce the views we adopt in relation to IMPF. In section 2, we begin by discussing readings shared by Slavic and Romance imperfectives, which are familiar in the literature under labels of the types “generic/habitual” on the one hand and “progressive/processual” on the other hand. Section 2.1 is on Bulgarian habituais in the indicative paradigm. In section 2.1.1 we identify some complex interactions of imperfect inflections, the locus of the IMPF operator, and perfective morphology on verb stems, and justify several important hypotheses in the paper. Namely, (a), in Bulgarian IMPF resides in the imperfect (or present) inflections of Indicative verbs; (b) morphological perfectivity and imperfectivity on verb stems make an independent semantic contribution when they combine with IMPF (i.e. with imperfect or (parallel) present verbs); (c) these two layers of morphologically distinct aspect are hierarchically organized as IMPF in tense inflections takes scope over perfective/imperfective morphology on verb stems when the two compose semantically. In section 2.1.2 we sketch an analysis of habitual imperfective readings, and discuss some consequences of the structurally layered aspectual morphologies noted in section 2.1.1. In section 2.2 we survey ongoing/processual imperfective readings, and outline an analysis within the tenets of this paper. As a reviewer notes, the results of sections 2.1 and 2.2 demonstrate that the Bulgarian imperfect is not primarily a temporal category given that, as we shall show, combinations of perfective verb stems with imperfect (and present) verb inflections derive habitual readings, not ongoing readings. In section 3, we examine a first instance of variation internal to Slavic, arguing in considerable empirical detail that Bulgarian contrasts with Russian and Polish since it lacks the types of imperfectives that in those languages are characterized by completion readings, and are dubbed ‘Factual’. In section 4, we argue that Bulgarian shares with Romance the so-called Intentional Imperfectives, which are restricted or absent elsewhere in Slavic. In section 5, we first examine imperfectivity in the evidential system traditionally known as the Renarrated Mood, and go on to discuss contrasts with the indicative mood. We argue that IMPF displays the same semantic and combinatorial properties in evidential constructions and indicative constructions, but is systematically hosted by a different morphology in the former: imperfective participles. Thus, an important claim in this paper is that morphology is a most crucial diagnostic for semantic imperfectivity in Bulgarian. On the one hand, in indicatives it is always encoded in imperfect and present inflections, not in verb stems, and semantically scopes over all other layers of aspectual information. On the other hand, in the Renarrated Mood IMPF is always encoded in

² The view that imperfective forms are semantically unmarked is most prominent in the Slavic tradition (see Altshuler (2010) for a recent survey of views on Russian), and exists in the Romance tradition. Concerning Russian, Borik (2002, 2006) develops a recent version of this idea. She characterizes the aspectual opposition as privative: imperfectives lack semantic content, and are the unmarked alternates of perfectives. That is, whenever the conditions of perfectivity do not obtain, there is imperfective aspect. Some Bulgarian grammarians view imperfects as semantically marked, and aorists as semantically unmarked/undefined, and similar ideas exist in Romance. In some recent proposals on French, however, imperfects lack semantic information, so are treated as unmarked categories. de Swart (1998, 2011) and Hacquard (2006), for instance, propose that the content of French imperfects derives from a variety of null operators in the clause.

the imperfective morphology of the participle verb, and it also scopes over other aspectual layers, including the prefixes. We also compare the Bulgarian evidential paradigm in its reportative version with the so-called Romance Narratives imperfects, which are also viewed as reportative. We go on to find important differences between the two. Concluding remarks are in section 6.

1.1. Introducing the Bulgarian TAME system

In this section we provide a brief sketch of some relevant properties of the Bulgarian Tense-Aspect-Modality-Evidentiality (TAME) system and relate them to some current views on aspect, before we proceed to discuss in more detail how Bulgarian imperfective readings compare to those in some other Slavic languages and in some Romance languages.

Bulgarian is a South Slavic language with an interesting status in the sense that it contains many of the core characteristics of other Slavic languages while it is also a member of the Balkan *Sprachbund*, and thus shares properties with some typologically distinct languages in the neighbouring geographic area. In addition, Bulgarian displays a number of temporal, aspectual and morphological commonalities with Romance, which we discuss in more detail in the following sections.³

In parallel with other Slavic languages, Bulgarian verbs encode a usually overt morphological distinction between perfective and imperfective forms associated with the label *vid* “type”, which in the Bulgarian tradition is often viewed as a grammatical aspectual category. Most verbs have morphologically non-derived imperfective forms and prefixed perfective counterparts; in addition, perfective forms can be turned into imperfectives by a morphological process known as *secondary imperfectivization* (roughly, using various allomorphs of suffix *-va*). Thus, many verbs in Bulgarian form morphological aspectual triplets, as illustrated with *study*, *write* and *read* in (1).

- | | | | | | | |
|-----|----|---------------------|---|---------------------------------|---|---|
| (1) | a. | uča (imperfective) | → | na-uča (perfective) | → | na-uča-vam (imperfective) |
| | | ‘study’ | | ‘study, learn’ | | ‘be in the process of learning’ |
| | b. | piša (imperfective) | → | na-piša (perfective) | → | na-pis-vam (imperfective) |
| | | ‘write’ | | ‘write completely’ | | ‘be in the process of writing completely’ |
| | c. | četa (imperfective) | → | pro-četa (perfective) | → | pro-čit-am (imperfective) |
| | | ‘read’ | | ‘read completely, till the end’ | | ‘be in the process of reading completely’ |

Secondary imperfectivization is common across Slavic, but what sets Bulgarian apart is its productivity, in contrast with, for instance, Russian.⁴ As noted by many (Comrie, 1976; Ivanchev, 1976a,b; Maslov, 1959; Markova, 2011; Pashov, 1999; among others), the Bulgarian aspectual system is the most grammaticalized one among the Slavic languages, in the sense that imperfective forms can be derived from virtually all perfective verbs. In most other Slavic languages, on the other hand, primary ‘*perfectiva tantum*’ verbs and certain verbs already bearing a perfective prefix cannot be further imperfectivized, as illustrated by the contrast between Russian and Bulgarian in (2)a and (2)b respectively.

- | | | | | | |
|-----|----|-----------------|-----------------------|----------------------|-----|
| (2) | a. | ruxnut → *ruxat | otšumet → *otšumlivat | zarevet → *zarevyvat | Rus |
| | | ‘collapse’ | ‘subside’ | ‘scream’ | |
| | b. | ruxna → ruxvam | otšumja → otšumjavam | zareva → zarevavam | Bg |
| | | ‘collapse’ | ‘subside’ | ‘scream’ | |
- (adapted from Maslov, 1959)

Another difference with most Slavic languages is that Bulgarian has preserved an old opposition between Imperfects and Aorists, and also makes use of Perfect tenses (present, past and future) in the Indicative Mood. As illustrated in Table 1, a Bulgarian verb with imperfective morphology, roughly corresponding to the traditional label *vid* can combine with three different tenses (with distinct tense morphology) that may refer to past events: aorist *čete*, Imperfect *četeše*, and present perfect *e čel*. In addition, Bulgarian verbs with imperfective stems that combine with imperfect morphology may also be prefixed by so-called perfectivizing prefixes: *pro-čita-še*.

The morphological richness of indicative verbs reflected in Table 1 results in complex layers of temporal and aspectual morphological make-up with at least three overt markers without precise counterparts elsewhere in Slavic, or in the languages of the Romance family. As a result, traditional or recent dichotomies such as ‘perfective/imperfective’,

³ Macedonian, which we do not discuss in this paper, shares properties of Bulgarian that set it apart from the rest of the Slavic family.

⁴ According to Filip and Carlson (1997), in Czech and Slovak *-va* may be a generic marker that in the absence of prefixation results in presents with habitual readings. Bulgarian *-va* is not restricted to habitual readings, but may appear in prefixless imperfect or present verbs with Ongoing readings, as in *Ivan tancuvaše* ‘Ivan was dancing.’ and *Zaminavam na selo* ‘I am going to the village’.

Table 1
Interaction between morphological vid and tense inflection in Bulgarian.^a

Tense	Aorist Past		Imperfect Past		Present Perfect (aux be + past participle)	
	Imperfective	Perfective	Imperfective	Perfective	Imperfective	Perfective
'read' (3sg)	<i>čete</i>	<i>pročete</i>	<i>četeše</i> / <i>pročitaše</i>	<i>pročeteše</i>	<i>e čel / četjal</i> / <i>e pročital</i>	<i>e pročel</i>
'write' (3sg)	<i>pisa</i>	<i>napisa</i>	<i>pišeše</i> / <i>napisvaše</i>	<i>napišeše</i>	<i>e pišel</i> / <i>e napisval</i>	<i>e pisal</i>
'receive' (3sg)	<i>polučava</i>	<i>polučī</i>	<i>polučavaše</i>	<i>polučeše</i>	<i>e polučaval</i> / <i>e polučel</i>	<i>e polučil</i>

^a In some cases we list more than one acceptable imperfective form (due to the availability of secondary imperfectivization, prefixation, and in some cases dialectal variation). We do not discuss subtle differences in meaning among some variants.

Table 2
The anatomy of viewpoint and situation aspect.

[Viewpoint [Imperfect/Aorist Inflection]	[Situation [Imperfective/Perfective V]	[Result P]] [Prefix]]]
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'viewpoint/situation', 'grammatical/lexical aspect', and so on, are sometimes ill-equipped to label or describe such rich combinations in Bulgarian, as will become clear in later sections.

To partially capture the semantic complexity that results from such morphologically encoded aspectual layers, we argue for a nuanced compositional hypothesis, anchored in the distinction between the two kinds of aspect in [Smith \(1991\)](#), but with some differences: Viewpoint vs. Situation. Adopting this dichotomy, we propose that in Bulgarian constructions that overtly encode only two distinct layers of morphological aspect, the imperfective/perfective morphology (a species of traditional *vid*) in the verb forms of [Table 1](#) roughly corresponds to Situation Aspect (atelicity/telicity) in semantics: imperfective *piš-* vs. perfective *pis-* 'write'. By contrast, within such a doubly faceted aspectual marking, the morphological contrast between imperfect tense and aorist tense inflections (imperfect *-še* vs. aorist *-a*) systematically encodes imperfective vs. perfective Viewpoints in the semantics. It is well known that the Slavic tradition associates prefixes with a perfectivizing function. We suggest that in Bulgarian, prefixes combined with the relevant tense inflections and the two varieties of verb stem morphology head a Resultative Phrase (a.o. [Svenonius, 2004](#); [Žaucer, 2009](#)), which functions as a small clause complement of the verb in the syntax. Thus, such prefixes constitute a sub-species of Situation aspect connected to resultativity, and are located in the third or most deeply embedded structural layer in a tripartite aspectual representation built compositionally. On this view, we could describe the morphology of *pročitaše* as one of a prefixed imperfective imperfect, and the one of *pročeteše* by dubbing it a prefixed perfective imperfect. However, in semantics both count as imperfectives. This is signalled by a shared *-še* inflection, which indicates an IMPF operator that scopes over other Bulgarian overt morphemes that also make aspectual contributions in semantics.

To summarize, Bulgarian verb forms of the indicative mood may combine at least three separate (often but not always) overt morphological layers encoding aspectual information. In this paper we argue that imperfect/aorist inflections systematically indicate Viewpoint operators, and take semantic scope over other aspectual layers. Imperfective/perfective verb stems are representative of a second aspectual layer, which scopes under Viewpoint operators; roughly speaking, it encodes telicity/atelicity as a species of Situation aspect. In such Bulgarian two-layered combinations, prefixes introduce a third layer of aspect. They head a small clause complement of the verb and encode resultativity. To repeat, as [Table 2](#) indicates, both the imperfective/perfective morphology on verbs and the prefixes scope under Viewpoint operators, so under imperfect inflections, which is our main concern.⁵

Thus, given that we distinguish between (semantic) Viewpoint and shades of Situation Aspect on the one hand and their various morphological manifestations on the other, our proposals sometimes comply with traditional oppositions, and at other times differ considerably from them.

More specifically, we argue in section 2.1 that the combination of different aspectual layers in *pročitaše/pročeteše* in [Table 1](#) prove particularly interesting to motivate our proposals on IMPF. As stated in the introduction, we claim that each

⁵ The renarrated mood differs from the indicative mood in so far as it lacks an overt imperfect vs. aorist inflection distinction. Thus, we argue in section 5 that in this mood, the correlation between morphology and imperfective readings is also one-to-one, but different from the morphological correlation established by indicative verbs. In renarratives, the imperfective morphology on a prefixless (participial) verb (one of the shades of traditional *vid*), systematically encodes the imperfective Viewpoint aspect in semantics, and prefixes encode the different flavors of Situation aspect. For a recent discussion of Bulgarian phenomena that in our view belong to the (various) realms of Situation aspect, see [Stambolieva \(2008\)](#).

Table 3
Interaction between morphological aspect and tense in Russian.

Tense	Past	
verb type (<i>vid</i>)	Perfective	Imperfective
'read' (3sg.Masc)	<i>pročítal</i>	<i>čítal</i>

layer of morphologically marked aspect makes an independent semantic contribution to the construction. Thus, these various pieces of morphology are not semantically inert, and compositionally contribute to the meaning of the sentence. In this respect Bulgarian can be viewed synchronically as both a morphological and a semantic hybrid between Romance, which uses Aorist, Imperfect and Perfect tenses with aspectual dimensions, and Slavic, which uses an opposition between imperfective and perfective verbs traditionally dubbed *vid*, secondary imperfectivization, and prefixes, which also encode aspectual dimensions.

Unlike Bulgarian, other Slavic languages do not make use of both tense inflections and morphological aspect on the verb when referring to past events, and several of them also lack perfect tenses, as illustrated in Table 3 for Russian. This, however, does not necessarily mean that they have a more limited number of imperfective readings, as we demonstrate in subsequent sections of this paper when we discuss Polish and Russian in some detail.

With regards to mood, Bulgarian grammarians typically describe four categories: *indicative*, *imperative*, *conditional*, and *renarrated* (*evidential*). In this paper we discuss the Indicative mood in more detail in sections 2 and 4, and dedicate section 5 to the Renarrated Mood, postponing illustration to that section.

To summarize, the purpose of this section was to mention some of the relevant properties of Bulgarian with regards to the phenomena that will be discussed in this paper, and to briefly correlate them in a simplified manner to current views adopted in this paper and partially based on Viewpoint vs. Situation aspects (Smith, 1991). Just as other Slavic languages, Bulgarian has morphologically overt aspect on verbs traditionally labelled perfectives and imperfectives (primary or secondary), and so-called perfectivizing prefixes, but unlike Slavic and in parallel with Romance, it also makes use of aorist and imperfect. We will argue that in Bulgarian imperfect (tense) morphology and imperfective/perfective (verb) morphology make independent semantic contributions in the syntactic environments where they combine, so neither is redundant or semantically inert. In addition, in contrast with both most Slavic and the Romance languages, Bulgarian exhibits different verb paradigms for the Indicative mood and the Renarrated or Evidential mood. The complex combination of these distinctions in the Bulgarian TAME system will play an important role in our proposals on the connections between morphological marking and imperfective readings in the next sections.

1.2. Introducing IMPF

It is well known that imperfectives exhibit various types of readings. Following Arregui et al. (2014), the guiding hypothesis adopted in this paper is that cross-linguistically, they share an invariant semantic core. According to Arregui et al. (2014: section 3.1), this core is encoded in an imperfective operator dubbed IMPF, which is a representative of Viewpoint aspect (Smith, 1991) and dominates the VP in the syntactic structure in (3)a. Following Kratzer, (3)a also encodes the hypothesis that the evaluation of assertions is made in relation to a topic situation represented syntactically and identified with tense. The semantic core for IMPF is given in (3)b. IMPF combines with a property of events *P*, and results in a property of situations true of a situation *s* iff in all situations *s'* accessible to *s* given an accessibility relation dubbed Modal Base (MB), there exists a *P*-event (i.e. *s'* has as part a situation exemplifying *P*).⁶

⁶ According to Kratzer (2011), in situation semantics, linguistic expressions are evaluated with respect to partial rather than complete worlds. Parts of possible worlds (situations) are considered primitives, so possible worlds have a complex internal structure made up of (potentially many) situations. Intuitively, a situation in the actual world is a part of what is going on, and the part-of-relation encoded in \leq in our later formulas may be very fine grained. Kratzer (1989) exemplifies these ideas by telling us that if Paula has painted a still life with apples, this situation will have sub-parts/sub-situations, like the situation of Paula painting an apple stalk. At the same time, the situation of Paula painting a still life with apples will be part of bigger situations, like the situation of Paula painting a still life with apples and making dinner. For Kratzer (1989), situations and sub-situations are contained in the same world. Thus, the time and location of the situation of Paula painting an apple stalk is a sub-part of the time and the location of Paula painting the apples, and of Paula painting a still life. In section 4, we adopt a modification of the last idea, allowing for situations and their parts to be identified across worlds; that is, a given situation in a possible world may be identified with a situation in another possible world.

In sum, situations can have other situations as parts, and be part of other situations. Worlds are maximal situations, not proper parts of other situations. Situations have temporal and spatial coordinates within a world, but there can be more than one situation in a single spatio-temporal slice, and a situation can include disconnected spatio-temporal parts. Events are situations that exemplify predicates, so in our formulas the events corresponding to the VP are situations that exemplify the VP-predicate. In (3)b, *l* is the type for events, *s* is the type of situations, and *P* is a variable ranging over properties of events.

- (3) a. [TP Tense_i [AspP IMPF [VP ... V...]]]
 b. **Interpretation of IMPF**

Given a context *c* and variable assignment *g*,

$[[\text{IMPF}]]^{c, g} = \lambda P_{\langle I, \langle s, t \rangle \rangle} \lambda s. \forall s': \text{MB}_\alpha(s)(s') = 1, \exists e: P(e)(s') = 1$, defined only if there is a contextually or linguistically determined salient modal base (MB) of type α .

Morphological manifestations of IMPF in Bulgarian are discussed in sections 2–4 in the context of the Indicative Mood (i.e. imperfect tense inflections), and in section 5 in the context of the Renarrated Mood (i.e. participles with imperfective stem morphology).

The analysis in (3)b adopts a standard view where quantifiers are interpreted in terms of a tripartite structure relating the meaning of a Restrictor/Restrictive clause to the meaning of a Matrix/Nuclear scope (Lewis, 1975; Kamp, 1981; Heim, 1982). On this view, IMPF is a quantifier that relates the topic situation identified with Tense, representing the Restrictor, to the event encoded in VP, representing the Nuclear scope.⁷ The topic situation or restrictor may be overtly represented in the sentence by means of an adverbial expression or an adjunct clause, as we see later. In such cases, its characteristics are fixed through compositional means. The topic situation may also be implicit or provided by extra-linguistic means/contextually given.

On this view, imperfectives do not associate with one 'default'/basic reading and several additional readings that result from pragmatic coercion, or, using a Jacobsonian terminology, are deemed to be 'transposed'. That is, in the approach adopted in this paper the variety of readings found in imperfectives results from different ways of restricting or specifying the kinds of situations IMPF may quantify over. This core idea is formally encoded by coupling the IMPF modal quantifier with several accessibility relations (dubbed Modal Bases (MB) by Arregui et al., 2014). For Bulgarian, they consist of the Generic MB in section 2.1, the Ongoing MB in section 2.2, and the Preparatory and Event Inertia MBs in section 4. Those relations are not systematically available in all languages, which is discussed in detail in sections 3–5, where we stress the characteristics of Bulgarian. In other words, cross-linguistic contrasts in the interpretation or the meaning flavors of imperfectives derive from different ways languages may adopt in {hardwiring into the semantics/grammaticalizing} restrictions on the situations IMPF may quantify over. On this view, IMPF is a category with an invariant meaning core. The specific readings that are possible for imperfectives in some languages but not in others signal types of situations that may be available or unavailable for quantification by IMPF. Familiar imperfective readings, such as the habitual and progressive types, which show no variation in Slavic and Romance and are discussed in section 2, result when IMPF quantifies over situations in the actual or evaluation world. Less familiar readings often called modal, which show variation and are mentioned in section 4 again in the context of Bulgarian, result when IMPF quantifies over situations in worlds that are not actual or differ from the world of evaluation.

The MBs associated with IMPF in Slavic and Romance differ from the familiar MBs paired to modal verbs such as English *must*, *can*, or *ought* in the recent literature. In the case of modal verbs, truth often depends on beliefs/knowledge of a speaker or agent (epistemic modal base), laws and obligations (deontic modal base), goals (teleological modal base), etc. By contrast, the modal flavors noted here for IMPF care about facts in the evaluation world, and do not crucially depend on the knowledge/beliefs of speakers/agents. Adopting Kratzer's terms, then, the modal flavors of IMPF could all fit a circumstantial modal base. That is, as Arregui et al. (2014) note, the restrictions on the domain of quantification of IMPF behind the cross-linguistic variation in imperfective readings in Slavic and Romance in this paper all share the characteristic of being 'event-oriented': they care about properties of events, not primarily about the knowledge state of a speaker or an agent. They deal with different ways of distributing events with respect to a topic situation/topic (reference) time. They may concern the normal distribution of events within a topic situation, which results in the habitual readings in section 2.1. However, they may also concern events prepared in the topic situation; this results in a less general reading we call *Intentional* in section 4, which distinguishes Bulgarian from many Slavic languages while pairing it with Romance. Alternatively, restrictions may concern the events whose consequences characterize the topic situation: the so-called *Factual Imperfectives* of Russian and Polish in section 3, which are not found in Bulgarian. Or restrictions may concern the culmination of events in the topic situation, which results in the Romance imperfectives called *Narrative* in section 5, also absent in Bulgarian. In this paper, then, Bulgarian is characterized as a language whose imperfectives do not display modal flavors that care about the consequences of, or the culmination of, events with the topic situation (time).

In sum, IMPF shares a unitary semantic architecture, and variation may arise in its readings because the grammar of some languages makes available to this quantifier certain accessibility relations that are unavailable in the grammar of other languages.

⁷ We do not attempt to analyze tense, other than offering some brief comments on Bulgarian presents in footnote 13. We suggest that presents combine IMPF with a temporal component. Bulgarian aorists are traditionally considered 'absolute' pasts; a stipulative move could be that they carry a Past operator.

2. Imperfective commonalities: Habituals and Progressives

In section 1, we set the goals of this paper, and introduced our general views on semantic imperfectives. Before we turn to variation in sections 3–5, in this section we discuss so-called habitual and ongoing readings in Bulgarian imperfectives, which are shared without variation across Slavic and Romance.

This section combines two goals. A first goal addressed in section 2.1.1 consists in justifying our claim that in Bulgarian IMPF resides in the imperfect tense inflection of indicative verbs. We couple this proposal to the idea that the perfective/imperfective morphology on verb stems makes its own independent semantic contribution when combined with imperfect tense inflections. Our second goal is comparative, and consists in identifying commonalities within our framework in those readings that display no semantic variation across Slavic and Romance.

Slavic and Romance verbal forms that count as imperfective from a morpho-syntactic view share two families of readings considered prototypical in some grammatical traditions. The first family called **Habitual** is discussed in section 2.1, reports on generalizations/general states, is also known as ‘characterizing’, ‘generic’, or ‘repetitive’. The second family in section 2.2 is the **Ongoing** type, also known as ‘progressive’, and ‘processual’.

As stated, imperfective morphology associates with an IMPF operator with modal characteristics, and different readings depend on restrictions on the domain of quantification of this operator all imperfectives share. Thus, Habitual and Ongoing imperfectives are distinguished by different domains of quantification. On the one hand, quantification for Habituals in section 2.1 involves normal or expected situations. On the other hand, Ongoing imperfectives in section 2.2 involve subparts of the topic situation.

2.1. Habituals

2.1.1. Bulgarian

We begin to illustrate Bulgarian Habituals in the Indicative mood in main clauses in (4).⁸ Sentences (4)a–d report on events that occurred with some generality involving repeated episodes, and (4)e on a general state often described as generic or continuous; here we unify both flavors.⁹ In the semantic literature, sentences with such readings are often analyzed with a generic/habitual operator in various types of constructions, including nominal expressions and others that involve tense and aspect. In our proposal, they are characterized by IMPF.

- (4) a. Predi 20 godini, detsata **gledaxa** po-malko televizija. Bg¹⁰
Before 20 years, children.Def watch.Impf.IMP less television
‘Twenty years ago, children watched less TV.’
- b. Kato živeex v Xolandija, (često) se **pärzaljax** po kanalice
As lived.Impf.IMP in Holland (often) Refl slid.Impf.IMP on canals.Def
‘When I lived in the Netherlands, (often) I skated on the canals.’
- c. Napoleon (vinagi) se **käpeše** sled dälga bitka.
Napoleon (always) Refl bathed.Impf.IMP after long battle
‘Napoleon always bathed after a long battle.’

⁸ It is traditional in discussions of aspect to focus on past tenses, where the difference between imperfective and perfective readings is best seen. From a comparative perspective, presents are problematic as they may display so-called modal readings (those denoting possible worlds) irrespective of aspect. Slavic presents raise the additional problem of variation; in East and West Slavic, verbs with present inflections and perfective prefixes have future meanings, and imperfective presents share present and future readings. In Bulgarian, by contrast, verbs with present inflections and perfective prefixes are ungrammatical in main clauses, and possible in embedded clauses, and their reading is necessarily habitual, as we discuss next. Slavic futures are also problematic; in East and West, imperfective futures contain auxiliaries, but perfective verbs are ungrammatical with future auxiliaries. In South Slavic, by contrast, both morphologically perfective and imperfective verbs are grammatical with future auxiliaries. Some of these comparative problems are avoided by concentrating on pasts, but we will also briefly mention Bulgarian presents, which share a crucial syntactic distribution and (a relevant partial) meaning with the imperfect tense.

⁹ We adopt the following system of abbreviations in the glosses: Impf = imperfective (*via*); IMP = Imperfect (tense); Perf = perfective (*via*); PRF = Perfect (tense); AOR = Aorist (tense); Def = definite article; Refl = reflexive; PR = prefix; CL = clitic; Past = past tense/past auxiliary; Pres = present (tense), 1/2/3 = first/second/third person; Sg = singular; Pl = plural; RM = Renarrated Mood; IM = Imperative Mood; Ppl = past participle; Aux = auxiliary; Q = question particle; Dat = dative; Inst = instrumental (case); Sec = secondary (imperfective); Part = particle; Cond = conditional; PV = passive voice. Note that not all glosses include full morphological detail, so as not to burden the reader. For example, person and number are often omitted when evident through an overt subject or not relevant to the particular claims that we advance; (im)perfectivizing prefixes/suffixes are not glossed as such, unless directly relevant to a specific point.

¹⁰ We adopt the following system of language abbreviations: Bg = Bulgarian, Cz = Czech, Eng = English, Fr = French, It = Italian, Pol = Polish, Por = Portuguese, Ro = Romanian, Rus = Russian, Slo = Slovenian, Sp = Spanish, Svk = Slovak, Ukr = Ukrainian.

- d. V minaloto Ivan često **izgarjaše** mljakoto.
In past.Def Ivan often PR.burn.Impf.IMP milk.Def
'In the past Ivan would often burn the milk.'
- e. (Väv filma Jurassic Park) dinozavrite **živeexa** v džunglata.
(In movie.Def Jurassic Park) dinosaurs.Def lived.Impf.IMP in jungle.Def
'(In the movie Jurassic Park) dinosaurs lived in the jungle.'

Let us examine morphology and syntax and its relation to semantics in the above paradigm. Sentences (4)a–e display verbs inflected in the Imperfect tense of the Indicative mood. In our view, in Bulgarian this hallmark systematically results in **semantic** imperfectivity (i.e. in a denotation of the type proposed for IMPF in (18)b, a claim we justify in the context of the perfective imperfects in (5)).¹¹ In other words, the structure of the sentences in (4) contains IMPF in Viewpoint aspect (Smith, 1991) located below Tense and above vP/VP, so in a position that syntactically c-commands/semantically scopes over the remainder of the structure, including the various possible overt manifestations of aspectual morphology on the verb: Tense > IMPF > VP. Expressed in traditional terms, our proposal corresponds to the idea that in Bulgarian, IMPF is both (a) morphologically marked, since it is indicated by the overt content of Imperfect tense inflections, and (b) semantically marked, since it has a fixed semantic content in all of its occurrences.

In more detail, (4)a and (4)c contain two morphological primary imperfective/unprefixed verbs both inflected for the imperfect: *gleda-xa* 'watched.3pl' and *kāpe-še* 'bathed.3sg' respectively. By contrast, (4)d contains a morphological secondary imperfective verb with a perfective prefix *iz-*, a secondary marker – roughly (v)a-, combined with the imperfect inflection *-še*. Irrespective of such morphological differences, (4)a, (4)c and (4)d all have a habitual imperfective reading. As we illustrate in section 2.2, similar morphological combinations may also participate in ongoing readings. In our view, this parallelism suggests that constructions with primary and secondary imperfectives, when inflected for the imperfect tense, share an IMPF operator c-commanding the remainder of the morpho-syntactic structure, including perfective prefixes when present. Roughly, the structure of (4)e, for instance, is [_{Tense} Past [_{Viewpoint} IMPF [_{XP} ... PR ...]]], where the prefix is taken to be a resultative complement of the verb, and so on. IMPF always exhibits the semantic core in section 1.2, and systematically scopes over the remainder of the construction, the essential point.

The sentences in (4) report on general states of affairs, so we unify them under the 'Habitual' label. However, they need not be identical in other interesting semantic respects, which we leave to future research. In particular, we limit discussion of secondary imperfectivization to the way it structurally composes with other layers of aspect in Bulgarian. In Bulgarian, constructions with secondary imperfectives may display both generic readings and ongoing readings when imperfect inflections combine with secondary imperfective morphology. A habitual construction with secondary imperfective morphology and an imperfect inflection is in (4)e. An ongoing construction with the same morphological combination is in (21)e in section 2.2.

In Bulgarian, then, secondary imperfectivization adds still another morphological layer to the very complex aspectual relations possible in this language. As we shall see at several points, this suggests that morphological labels such as perfective/imperfective and semantic labels such as viewpoint/situation by themselves may successfully describe less complex combinations in other Slavic languages, but are ill-equipped to reflect morphological and semantic complexities in Bulgarian. Our proposal is that secondary imperfectivization is an aspectual layer that scopes under IMPF (so under the imperfect tense inflection), and may result in habitual readings when the IMPF that dominates it accesses the generic MB in this section, or in an ongoing reading when the dominating IMPF associates with the ongoing MB in section 2.2: [IMPF [-va [Prefix]]]. As before, the prefix represents a resultative structure complement of the verb.

In Bulgarian, habitual constructions are particularly important for our purpose because they are the site of complex layers of morphology, which can be used to support several related claims in this paper. One such claim we recall is that imperfect (and present) inflectional tense morphology on the verb encodes IMPF. A second claim is that when such a tense morphology combines with perfective/imperfective morphology (i.e. *vid*) on the verb stem, each piece of morphology makes an independent semantic contribution to the construction. A third claim is that these two distinct layers of morphology are hierarchically organized from a semantic perspective, with the imperfect or present tense morphology systematically scoping over the morphology on the verb stem, resulting in the structure [IMPF ... [PERF ...]]. Note that in situation semantics the distinction between viewpoint and situation aspects is blurred, so it is not crucial to decide whether

¹¹ Our general idea is not new, but its implementation is novel. For instance, Ivanchev (1976b) considers that in semantics the morphological perfective/imperfective opposition elsewhere in Slavic corresponds in Bulgarian to the aorist/imperfect opposition (also Comrie, 1976; Bertinetto and Delfitto, 2000). Bulgarian imperfects are inflectional; perfective/imperfective morphology on verbs may be classified as inflectional or derivational. However, such contrasts belong in morphology and need not play a role in semantics. In some theories of morphology (i.e. Distributive Morphology), they are orthogonal to the semantic issues at hand.

PERF is better viewed as a second viewpoint category scoping under the first, or as a species of Situation aspect, a topic that reappears in ongoing readings in section 2.2.

Let us proceed to illustrate imperfect and present inflections combined with perfective stems to motivate these related but nevertheless independent claims. In current Bulgarian, verbal forms such as *pročeteše* in Table 1, which combine an imperfect inflection (-še) with a stem with perfective morphology, have a limited syntactic distribution. They are {restricted to/grammatical in} constructions with habitual interpretations, and within those constructions must appear in (a) adjunct clauses introduced by temporal-like connectives such as those illustrated in (5)a–c, or (b) if-clauses or antecedents in conditional constructions, as in (5)d. Advancing ideas on the analysis in section 2.1.3, this means that they are limited to restrictor clauses that encode (large) topic situations, and excluded from nuclear scope clauses.

- (5) a. (Vseki păt), kogato Marija **pročeteše** тази книга, тѝа плачеше. Bg
(Every time), when Maria PR.read.Perf.IMP this book, she cry.Impf.IMP
'Every time / when Maria would read this book (from cover to cover), she would (then) cry.'¹²
- b. Četeše ot sutrim do večer, dokato sivata svetlina na kišavija zimen
Read.Impf.IMP from morning to evening, until grey.Def light of slushy.Def wintery
den se **prevărneše** v mrak. (D. Dimov, Tobacco)
day Refl PR.turn.Perf.IMP into darkness.
'He would read from morning till evening, until the grey light of the slushy wintery day would turn into darkness.' (our glosses and translation)
- c. Štom **napišeše** pismo, toj ti otgovarjaše.
As.soon.as PR.write.Perf.IMP letter, he you.CL PR.answer.Impf.IMP
'As soon as you wrote a letter, he would answer you.' (Bertinotto and Delfito, 2000: p. 215 ex (28))
- d. Ako njakoj **krivneše** da bjaga prez deretata, mu trošexa
If somebody swerve.Perf.IMP to run through ravines.Def, cl.Dat break.Impf.IMP
kokalite s točen dalečen udar i pak „vsičko si idvaše na mjestoto”.
bones with precise far blow and again 'all Refl come.Impf.IMP to place.Def'
"If somebody turned running through the ravines, they would break his bones with a well-targeted blow from afar and then again 'everything would come back to normal'" (Anti-government protest blog, Feb 3, 2013; retrieved from http://izsofia.blogspot.ca/2013_02_01_archive.html on March 19, 2014)

A detailed analysis of presents is beyond the scope of this paper.¹³ However, the subset of readings and the syntactic distribution presents share with imperfects suggest that they may also encode IMPF. Namely, verbs that combine a present inflection with a perfective stem are parallel to imperfects in also being limited to adjunct-clauses and if-clauses in constructions with habitual readings, as in the present counterparts for (5)a–d in (6)a–d. (6)a, for instance, is the minimal pair for (5)a and combines a perfective stem with a present inflection, and so on.

¹² An anonymous reader finds indefinite objects more natural in sentences of type (5)a–(6)a, and suggests (i) as a better alternative.

- (i) Vseki păt, kogato M. pročitaše njakoe ljubovno stixotvorenje, tѝa se razplakvaše.
Every time, when M. PR.read.Impf.IMP some love poem, she Refl PR.cry.Impf.IMP
'Every time M. would read some love poem, she would start crying'.

Example (5)a with a deictic determiner, which seems to involve focus, appears equally natural to two of our informants and one of the authors, who is a native speaker of Bulgarian.

¹³ Adopting a referential approach to tense (Partee, 1973 and later work), and the view that tenses represent intervals, we characterize the Bulgarian present as an inflectional morpheme that introduces an interval that may either include/be coextensive with Speech Time or extend into the future/follow Speech Time. However, this interval cannot extend into the past, that is, be prior to Speech Time, which distinguishes present from imperfect inflections. Thus, it is well known that Bulgarian presents may be modified by deictic adverbials such as *utre* 'tomorrow', but differ from imperfects and cannot be modified by *včera* 'yesterday'. Another notable feature of Bulgarian presents is a parallelism with German/Spanish presents, in contrast with English (simple) presents. That is, Bulgarian presents may combine with durative adverbials such as *ot* 'since' that extend into the past, as in (i.a) compared to (i.b) vs. (i.c).

- (i) a. Ivan čaka Marija ot minalata sedmica. Bg
Ivan wait.Impf.Pres Mary since last.week
b. Ivan espera a María desde la semana pasada. Sp
Ivan wait.Pres to Mary since the last week
c. John is waiting/*waits for Mary since last week. Eng

An extensive literature exists that attributes the characteristic of (i.a–i.b) to the compositional effect of durative adverbials. This allows to maintain the hypothesis that the relevant presents do not extend into the past. Our very brief observations suggest that Bulgarian present inflections encode a temporal component coupled to the IMPF component we assign to their semantics in the body of the paper.

- (6) a. (Vseki pät), kogato Marija **pročete** тази книга, тја плаče. Bg
 (Every time) when Maria PR.read.Perf.Pres this book, she cry.Impf.Pres
 'Every time / when Maria reads this book (from cover to cover), she (then) cries.'
- b. Čete ot sutrim do večer, dokato sivata svetlina na kišavija
 Read.Impf.Pres from morning to evening, until grey.Def light of slushy.Def
 zimen den se **prevärne** v mrak.
 wintery day Refl PR.turn.Perf.Pres into darkness.
 'He reads from morning till evening, until the grey light of the slushy wintery day turns into darkness.'
- c. Štom **napišeš** pismo, toj ti otgovarja.
 As soon as PR.write.Perf.Pres letter, he you.CL PR.answer.Impf.Pres
 'As soon as you write a letter, he answers you.'
- d. Ako njakoj **krivne** da bjaga prez deretata, mu trošat
 If somebody swerve.Perf.Pres to run through ravines.Def, cl.Dat break.Impf.Pres
 kokalite s točen dalečen udar i pak „vsičko si idva na mjestoto”
 bones with precise far blow and again 'all Refl come.Impf.Pres to place.Def'
 'If somebody turns running through the ravines, they break his bones with a well-targeted
 blow from afar and then again 'everything comes back to normal.'

The distribution of perfective imperfects/presents in current Bulgarian may be a recent restriction, perhaps of a syntactic nature. Habitual perfective imperfects in main clauses of type (7) are documented in the writings of relatively recent writers (Elin Pelin, the author of the example died in 1949). However, in main clauses perfective imperfects now sound archaic, and no longer belong to natural speech.

- (7) Toj trāgvaše bavno, [. . .], **krivneše** kām selo, posle se **otbieše** Bg
 He go.Impf.IMP slowly, turn.Perf.IMP towards village, then Refl PR.direct.Perf.IMP
 prez livadite. . .
 through meadows.Def
 'He would walk slowly, he would swerve towards the village, then he would turn towards the fields.'
 (abridged from Elin Pelin, 'Lepo', our glosses and translation)

We describe the readings in the above paradigms by means of the correlations we establish between morphological marking and semantic interpretation. First, the two verbs in each of the above constructions are marked with imperfect or present morphology. This inflectional morphology encodes IMPF, and its semantic contribution in this case is roughly similar to the one provided by adverbs of quantification such as *usually*, *always*, etc. In other words, the (universal) operator IMPF infuses the whole construction with a habitual reading – takes semantic scope over both clauses – so the events described in embedded and main clause are repetitive. Second, IMPF encoded in the tense inflections thus takes semantic scope over the perfective stem morphology of the embedded verbs. This morphology is not vacuous but has the semantic function of presenting the (habitual) events/situations described in the subordinate clause as distinct episodes each one of them complete. Depending on precise views, the semantic effect of this perfective stem morphology could be assigned to the realm of perfectivity (i.e. viewpoint), or to the realm of telicity (i.e. situation). However, within situation semantics the distinction between the two aspects need not be strict, and the interpretation can be built compositionally in terms of two distinct operators organized hierarchically, each with an appropriate denotation: [IMPF [PERF]]. Third, the perfective morphology on the embedded verb combines compositionally with different temporal connectives in the embedded clause, which results in a variety of temporal sequencing effects with respect to the events/situations described in the matrix clause. That is, depending on the connective, each (complete) episode in the adjunct clause may follow or precede events in the matrix clause. On the one hand, in (5)a and in (6)a, the resulting temporal sequencing effect is similar to the one with an *after*-clause. The reading of these examples then is similar to *Usually/always Mary finished/finishes reading this book, and then she cried/cries*. Parallel comments apply to (5)c, and (6)c, where each letter that was/is written was/is followed by an answer. By contrast, the connective in (5)b and (6)b functions like a *before*-clause when composed with the perfective verb. In other words, each day's turning into darkness (perfective stem) is preceded by the reading activity, so similar to *He would usually/always read before it would turn dark/He usually/always reads before it turns dark*.

The imperfective morphology on the embedded verb also makes a semantic contribution to the construction, and sequencing effects give way to the availability of a simultaneous interpretation (which is impossible when there is perfective morphology in the embedded verb). That is, with imperfective morphology in the embedded verb, the (habitual) events/situations described in the embedded clause and the (habitual) events described by the matrix clause are

presented as simultaneous, with each episodic event in the embedded clause correlated with an event in the matrix that is also ongoing. This is illustrated in (8)a and (8)b, which are minimal pairs corresponding to the perfective imperfects and presents in (5)a and (6)a, respectively.

- (8) a. (Vseki păt,) kogato Marija pročitaše тази книга, тѝа плачеше. Bg
(Every time), when Maria PR.read.Imp.IMP this book, she cry.Impf.IMP
'Every time Maria was reading this book (from cover to cover), she would be crying (while reading).'
- b. Vseki păt, kogato Marija pročita тази книга, тѝа плаче.
Every time, when Maria PR.read.Impf.Pres this book, she cry.Impf.Pres
'Every time Maria is reading this book (from cover to cover), she cries (while reading).'

In sum, imperfect and present tense inflections encode habituality, or are representative of a (universal) IMPF operator that similar to adverbs of quantification of the type of *usually* takes semantic scope over the construction, including both the embedded clause and the matrix clause. The perfective morphology on the subordinate verb stem functions like a PERF-like operator under the scope of the habitual operator: it presents the (habitual) eventualities depicted in the subordinate clause as distinct episodes that are complete. The connective in the subordinate clause combines with this PERF-like operator in the embedded clause to trigger different sequencing effects. Depending on connective the (habitual) events described in the matrix clause may follow or precede those in the embedded clause. When the embedded verb carries imperfective morphology, events in the subordinate clause and those in the main clause are simultaneous.

The above examples, then, are important to support several proposals in this paper, as mentioned previously. One, they motivate the claim that IMPF is encoded in the imperfect tense inflection (or also in the present tense inflection). Two, they motivate the claim that when these (overt) inflectional affixes combine with an (also overt) perfective morphology on verb stems, each morphological marker independently contributes to the semantic interpretation of the construction. Thus, neither can be considered semantically null or vacuous. Third, they motivate the claim that the two (overt) layers of aspect are organized with the imperfect/present morphology holding IMPF taking semantic scope over the morphology of the embedded verb stem. Once we outline the analysis we adopt for habituais in section 2.1.3, we will briefly state the significance of these complex layers of aspectual operators within our framework.

We continue with a brief mention of Mood in the context of habituais. Bulgarian uses Indicative verbs as in (4) for, roughly speaking, direct evidence justifying belief or common knowledge, and displays a Renarrated Mood traditionally viewed as encoding indirect evidence (see section 5 for details). More precisely, sentence (4)e displays an Indicative verb and is felicitous since the initial phrase in brackets signals direct information. However, dinosaurs are extinct, so it is unlikely that speakers could witness their living conditions (unless they saw the movie *Jurassic Park*); thus, without the context in brackets in (4)e, the alternative to encode indirect evidence in section 5 may sound preferable: *Dinozavrite živeeli v džunglata* 'Apparently, dinosaurs lived in the jungle'.¹⁴ In section 5 we argue that imperfective participles such as *živeeli* encode IMPF in the Renarrated Mood with the same semantic properties as in the indicative mood. This, then, indicates that IMPF may appear under a variety of overt morphological guises in Bulgarian.

As a last point, we mention a characteristic of Habituais in narrative contexts where Bulgarian behaves like other Slavic languages and like the Romance languages. The usual view is that in Slavic morphological perfective verbs are the usual means to advance narrations, and morphological imperfectives provide a stage or background. In Romance the idea is that Aorists/Preterites advance narrations, and Imperfects do not. However, Habituais are an exception to this situation, and are suitable candidates in contexts that advance narrations in all these languages. We now illustrate this characteristic via Bulgarian in (9), where all the verbs carry an imperfect morphology representative of IMPF (example inspired by French (16) from Bonami (2002)). As we will see later, Slavic and Romance languages all participate in this situation for habituais within the specific morphology of each group (imperfective morphology in Slavic, and imperfect morphology in Romance).¹⁵

¹⁴ It is also possible to express this meaning using the present perfect tense, namely by adding an overt 3rd person auxiliary to the RM version. We do not discuss such an option further here. However, according to Pashov (2005), a.o., the RM pattern is reportative, and the present perfect version is inferential.

¹⁵ An anonymous reviewer comments that in (9) narrative advancement seems determined by world knowledge. We do not have an analysis of why narrative advancement is felicitous in (9), and our aim is to highlight parallelism between Bulgarian and other Slavic languages on the one hand, and Romance on the other. However, it is important to note that imperfective habituais may participate in narrative advancement, as this may be ignored in the literature, and the relevant characteristic exclusively connected to perfectives (as, for instance in Borik, 2002 for Russian. Russian also participates in patterns parallel to (9)).

- (9) Vseki vtornik Ivan **objadvaše** pri baba si. Bg
 Each Tuesday Ivan had.breakfast.Impf.IMP at grandmother his
Trăgvaše ot rabota v edinadeset.
 Left.Impf.IMP from work at eleven.
Minavaše prez slatkarnicata i **kupuvaše** torta
 Went.Impf.IMP by bakery.Def and bought.Impf.IMP cake.
Vrăštaše se v 11:30 da prigotvi objada.
 Returned.Impf.IMP Refl at 11:30 to prepare lunch.Def
 ‘Each Tuesday, Ivan had lunch with his grandmother, left work at eleven, went by the bakery and bought a cake, and returned at eleven thirty to prepare lunch.’

With the above characteristics of Bulgarian Indicative Habituals in place, we turn to brief comparisons with other Slavic languages and Romance.

2.1.2. A crosslinguistic comparison of Habituals

This section stresses semantic homogeneity, and lack of variation in Habituals. It also serves to highlight that the complex aspectual system of Bulgarian harmoniously combines morphological properties independently found in each of our families. That is, when Bulgarian is compared to other Slavic languages, Habituals find counterparts in morphologically primary and secondary (past) imperfective verbs. When Bulgarian is compared to Romance, Habituals find counterparts in (indicative) imperfect verbs, without primary/secondary imperfective distinctions. None of the languages selected for illustration next, then, are formally identical to Bulgarian, and also differ from each other in precise morpho-syntactic ways. In our analysis, however, all the following examples share the semantic core of IMPF first given in section 1.2 and involve the accessibility relation or Modal Base (MB) called ‘generic’, which we introduce formally in section 2.1.3 (see (19)).

Let us examine Slavic primary imperfectives. Equivalents for the Bulgarian Indicative verb (4)a with a primary imperfective are in (10), where Polish (10)a stands for West Slavic, Russian (10)b for East Slavic, and Slovenian (10)c for South Slavic.

- (10) a. Dwadzieścia lat temu dzieci **spędzały** mniej czasu przed telewizorem. Pol
 Twenty years ago children spent.Impf less time in.front.of TV
 ‘Twenty years ago children **spent** less time in front of the TV.’
 b. Dvadcat’ let nazad deti **smotreli** televizor men’she. Rus
 Twenty years ago, children watched.Impf TV less
 c. Pred dvajsetimi leti **so** otroci manj **gledali** televizijo. Slo
 Before twenty years are children less watched.Impf TV
 ‘Twenty years ago children **watched** less TV.’

The above languages differ from Bulgarian in lacking an (Indicative) imperfect, and IMPF is signalled by a morphological primary imperfective verb with a participial shape: *speḡ dzaly*, *smotreli*, and *gledali* respectively. In addition, in Slovenian (10)c a second position auxiliary morphologically encodes past in all persons (this is not a perfect auxiliary in contrast with the situation in Bulgarian).

The difference between Bulgarian and other Slavic languages is morpho-syntactic, not semantic. In Bulgarian indicatives, IMPF is overtly encoded mainly in the imperfect/present, not on the imperfective morphology of the verb. In our view, the above patterns share with Bulgarian an IMPF operator with a fixed semantic content above VP, but this operator is phonologically null. Stated in traditional terms, then, our proposal corresponds to the (Jakobsonian) idea that primary imperfectives are morphologically unmarked in the above instances. From a semantic perspective, however, such imperfectives are marked, since IMPF while phonologically null, nevertheless provides a fixed or ‘marked’ meaning.

Other Bulgarian (indicative) Habituals in (4) find close equivalents in past primary imperfectives elsewhere in Slavic. They include a Ukrainian equivalent for (4)b in (11)a standing for West Slavic, a Czech equivalent of (4)c in (11)b for West Slavic, and Slovenian (11)c standing for South Slavic. Parallel examples could be cited in other languages.

- (11) a. Koly ja zhyv u Holandiji, (chasto) ja **katavsya** po kanalam. Ukr
 When I lived in Holland, (often) I skated.Impf on canals
 ‘When I lived in Holland, I often skated on the canals.’
 b. Po dlouhou bitvu, Napoleon se (vždycky) **koupal**. Cz
 After long battle, Napoleon Refl (always) bathed.Impf
 c. Po dolgi bitki **se je** Napoleon (vedno) **kopal**. Slo
 After long battle, Refl Past Napoleon (always) bathed.Impf
 ‘After a long battle, Napoleon always bathed.’

In section 2.1.1 we noted that secondary imperfective verbs in the imperfect could also function as (indicative) Habituals in Bulgarian. Secondary imperfectives with a similar role now include Polish (12)a–b, and Russian (12)c. We propose that in these languages secondary markers encode IMPF. In traditional terms, secondary imperfectives are both morphologically marked, and semantically marked: they overtly signal an IMPF with semantic content.

- (12) a. Tomek zawsze **przypalał** mleko. Pol
 Tomek always PR.burned.Impf milk
 'Tomek always burned the milk.'
 b. Po długiej bitwie Napoleon zawsze **wymawiał** imię Walewskiej.
 after long battle Napoleon always PR.pronounced.2Impf. name Walewska.Gen.
 'After a long battle, Napoleon always pronounced the name of Walewska.'
 c. Igor chasto **raskrashival** zabor. Rus
 Igor often PR.painted.2Impf. fence
 'Igor often painted the fence.'

Bulgarian Habituals of type (4)e can be compared to other Habituals in (13)a–c for West, East, and South Slavic, respectively.

- (13) a. Dinozavry **zhyly** v dzhunglyah. Ukr
 Dinosaurs lived.Impf in jungle.
 b. Dinsaure **žili** v džungli. Svk
 Dinosaurs lived.Impf in jungle.
 c. Dinozavri **so živeli** v džungli. Slo
 dinosaurs Past lived.Impf in jungle
 'Dinosaurs lived in the jungle.'

We noted that Habituals may participate in constructions that advance the plot in narrations, as in Bulgarian (9), where all verbs carry imperfect inflections. Polish (14), with an interesting combination of primary and secondary forms (inspired by French (16) in (Bonami, 2002)), illustrates the same characteristic elsewhere in Slavic.

- (14) W każdy wtorek Jean **jadł** obiad ze swoja babcią. **Opuszczał** biuro o Pol
 In each Tuesday J. ate.Impf lunch with his grandma. Left.Impf office at
 jedenastej. **Zatrzymywał** się w piekarni żeby kupić ciasto. **Przychodził** do
 eleven. Stopped.Impf Refl at bakery in.order.to buy cake. Came.Impf to
 domu o w pół do dwunastej aby gotować.
 house at half before noon in.order.to cook
 'Each Tuesday, Jean ate (Impf) lunch with his grandma. He left (Impf) the office
 at eleven. He stopped (Impf) at the bakery in order to buy a cake. He arrived (Impf) at home at half to twelve in
 order to cook.'

In sum, Habitual imperfective readings are general in Slavic, and both primary and secondary morphological verbs participate in the relevant interpretations.

Turning now to Romance, the sentences in (4) find close equivalents with Indicative Imperfect verbs in this family. To illustrate, (4)a closely corresponds to Portuguese (15)a, (4)b to French (15)b; (4)c and (4)e may be rendered into Spanish by (15)c and (15)d, respectively.

- (15) a. Há vinte anos, as crianças **viam** menos televisão. Por
 Aux twenty years, the children watched.Impf less TV
 'Twenty years ago children watched less TV'
 b. Quand j'habitais en Hollande, je **patinais** souvent sur les canaux. Fr
 When I lived.Impf in Holland, I skated.Impf often on the canals
 'When I lived in Holland I often skated on the canals.'
 c. Despues de una larga batalla Napoleon siempre se **bañaba**. Sp
 After of a long battle, Napoleon always Refl bathed.Impf
 'After a long battle, Napoleon always bathed.'

- d. Los dinosaurios **vivían** en la jungla. Sp
 The dinosaurs lived.Impf in the jungle
 ‘Dinosaurs lived in the jungle.’

Romance Habituals also participate in constructions where the narration advances, with French (16) similar to Bulgarian (9) and Polish (14). Other Romance languages could be added, so similarities need not be belabored.

- (16) Chaque mardi, Jean **déjeunait** chez sa grand-mère. Il **partait** du Fr
 Each Tuesday, Jean lunched.Impf at his grandmother. He left.Impf from.Def
 bureau à onze heures. Il **passait** par la pâtisserie et **achetait** un
 office at eleven hours. He went.Impf by the pastry.shop and bought.Impf a
 gâteau. Il **arrivait** à onze heures et demie pour préparer le repas.
 cake. He arrived.Impf at eleven hours and half to prepare the meal.
 ‘Every Tuesday, Jean had lunch with his grandmother. He left
 his office at eleven. He stopped at the bakery to buy a cake. He arrived at half past eleven to cook the meal.’
(Bonami, 2002)

To conclude our brief comparison, Bulgarian imperfectives with habitual readings express generalizations, habits, customs, and general states, similar to counterparts elsewhere in Slavic and Romance. However, habituals may be encoded in rather different morphologies depending on the language. In the Bulgarian indicative mood, habituals are encoded in either imperfect inflections or present inflections. In other Slavic languages, habituals rely on the imperfective/perfective morphological dichotomy affecting verb stems. In Romance, they rely on imperfect (or present) inflections, with points of contact with Bulgarian, but also with important differences.

2.1.3. An analysis of Habituals

In this section we directly borrow formal proposals from Arregui et al. (2014: section 3.1), which we briefly summarize. We refer the interested reader to the cited article for further details and discussion. Recall that the main idea is that Habitual readings may be encoded in different morphologies depending on the language, but nevertheless share a common semantic core identified with IMPF. They are encoded in imperfective verb forms in most Slavic languages, and in imperfect or present inflections in Bulgarian and Romance. The syntactic structure for IMPF behind these various morphologies is repeated in (17), and its semantic core in (18).

- (17) $[_{TP} \text{ Tense}_i [_{AspP} \text{ IMPF } [_{VP} \dots V \dots]]]$

(18) **Interpretation of IMPF**

Given a context c and variable assignment g ,

$[[\text{IMPF}]]^{c, g} = \lambda P_{\langle I, \langle s, t \rangle \rangle} . \lambda s . \forall s' : \text{MB}_\alpha(s)(s') = 1, \exists e : P(e)(s') = 1$, defined only if there is a contextually or linguistically determined salient modal base (MB) of type α .

In the approach we adopt, MBs capture readings in imperfectives by identifying different restrictions on the types of situations quantified by IMPF. Habituals involve normal/expected situations, without variation in our languages. More precisely, IMPF quantifies over characteristic sub-situations of the topic situation, accessing the Generic MB in (19).

- (19) $\text{MB}_{\text{generic}} = \lambda s . \lambda s' . s'$ is a characteristic part of s .

In *Twenty years ago, children watched less TV* in (4)a, the topic situation that serves as input in (17) is what was going on twenty years ago, and the claim is that children watched less TV (than now) when they watched TV in the past. Omitting the comparative, truth conditions for (4)a are in (20): the sentence will be true iff all relevant characteristic sub-situations of the topic situation are such that in them there was an event of children watching less than a certain amount of TV.

- (20) $[[[(4)a]]]^{c, g} = 1$ iff
 $\forall s' : \text{MB}_{\text{generic}}(s_{\text{relevant 20-years-ago situation}})(s') = 1$,
 $\exists e : e$ is an event of the children watching less TV than now in s .

Two features of the outlined proposal deserve mention. First, the analysis exploits a characteristic of the situations framework, which is that it does not strictly distinguish between Tense, Aspect, and Modality. In the above proposal,

Habituals are viewed as ‘factual’/‘actual’ but there is a modal dimension that speaks of possible situations. In other words, **modality** is introduced by treating the domain of quantification in terms of normal/expected situations: IMPF quantifies over situations that obey laws/expectations regarding TV watching by children then (e.g. children watch(ed) at most 2 h of TV per day). Quantification is thus restricted to actual/factual situations, but the analysis makes predictions regarding non-actual possible situations: if they are normal situations of children watching TV 20 years ago, they will also be situations of children watching an amount of TV that is smaller than what children watch now.

The second feature concerns the interaction of VP and IMPF in (17). The situations framework does not formally distinguish between Situation and Viewpoint aspects (Smith, 1991). However, the analysis acknowledges the effect of Situation on Viewpoint by assuming that in (17) the granularity of the domain of quantification of IMPF will be affected by the type of event encoded in VP. Informally, habitual readings are more likely to arise with ‘large’ (topic) situations¹⁶ such as *(What was going on) twenty years ago* in (4)a/(20) than with small (topic) situations such as *my mother entered the room* in *When my mother entered the room, I was talking to my boyfriend* discussed in section 2.2 below. In other words, quantification in habituals will only take place over situations ‘large enough’ to accommodate an event with the relevant property, and such a requirement will project as a presupposition to the topic situation as restrictor. To repeat, this feature captures the effect of Situation Aspect usually encoded in VP on Viewpoint Aspect usually encoded in IMPF, without strictly distinguishing between these two types of traditional aspects. The idea that situations may differ in size seems advantageous when elucidating the properties of Bulgarian perfective imperfects and presents introduced in section 2.1, where several hierarchically organized layers of aspect combine. Let us briefly revisit these habitual constructions with embedded perfective imperfects and presents in (5)–(8) in section 2.1.1, which provide support for our idea that IMPF resides in imperfect/present inflections in Bulgarian.

A detailed analysis of such constructions is beyond the scope of this paper, since it requires an understanding of before-like clauses, after-like clauses, and an understanding of conditional constructions. The following remarks are thus preliminary and simply identify why those constructions prove particularly interesting within the situations framework of this paper, indicating lines for future research. We first provide some brief structural remarks. The usual analysis of habitual constructions with overt clausal restrictors is with an adverb of quantification, our IMPF operator, scoping over both the restrictor and the nuclear scope clause. Within such a structure, the perfective morphology on the embedded verb stem is similar to a PERF-like operator embedded within the restrictor clause: [IMPF [Mary PERF read book] [Mary cry]].

Within the analysis adopted for IMPF, the distribution of combinations of imperfect/present tense inflections with perfective morphology in section 2.1.1 is limited to the overt restrictor clause that functions as a topic in the structure above. It is excluded from nuclear scope clauses, so, naturally, from nuclear clauses with implicit topic situations. Within our approach, such a limited distribution is of some theoretical interest. As we noted, topic situations in constructions with habitual readings are extended, or of a ‘large’ size defined in terms not of time but of iterativity/plurality in the specific case of Bulgarian. Thus, we could speculate that this specific ‘size’ requirement on the restrictor or topic clause in habituals allows such a restrictor to be the syntactic site that in Bulgarian may grammatically combine two different types of aspectual morphology: imperfect inflection and perfective stem. We showed that each of these pieces of morphology makes a semantic contribution affecting described events, so the suggestion here is that these complex meaning relations can only be encoded in ‘large’ topic situations (and that nuclear scope clauses are unable to reflect them in the absence of overt restrictors). If this speculation is on the right track, it could be that the recent prohibition against perfective imperfect and present verbs in nuclear scope clauses in Bulgarian could be indicative of a semantically driven as opposed to a syntactically driven change.

To conclude, Slavic and Romance Habituals share without variation the syntactic structure for IMPF in (17) and the fixed denotation in (18). In addition, Habituals access the accessibility relation or MB (19), which cares about the distribution of normal situations in relation to a (relatively ‘large’) topic situation identified with Tense. On this view,

¹⁶ Situations as parts of worlds may be less temporally or spatially extended and also lack in some key players. The ‘size’ of situations has been a key ingredient in the resolution of donkey anaphora in sentences of the type *Every farmer who owns a donkey beats it* (see Heim, 1982, 1990, a.o.). Within the situations approach, the informal idea on donkey anaphora is that in the overall world there are ‘small’ enough (minimal) situations that contain only one donkey and one owner, and that those situations can be used to obtain unique referents for donkey pronouns. For Heim this is obtained in terms of a presupposition that projects from the nuclear scope to the restrictor. Here we are inspired by Cipria and Roberts (2000), who suggest that the ‘size’ of situations also matters in the aspectual domain, and that some situations may not be sufficiently extended temporally, spatially, or in other ways to evidence an eventuality. In adopting Cipria and Robert’s general idea, we propose that Bulgarian offers support for the assumption that habitual constructions represent a case where (topic) situations that function as restrictors need to be of a ‘large’ size, which we interpret in an iterative sense: that is, situations must be sufficiently extended so as to include a plurality of events. In other words, the topic situation should have parts that are large enough to accommodate more than one instantiation of the relevant property of events. As Kratzer (2011), notes, however, there is no consensus about what possible situations are, just like there is no consensus about possible worlds or events, so the label ‘large’ we relate to iterativity in habituals in Bulgarian remains intuitive. In section 2.2 we will speak again of the size of situations in the context of ongoing readings, contrasting them with habitual readings and suggesting that in Bulgarian they do not tolerate morphologically perfective imperfects or presents because their topic situations are small.

Habituals display a high level of semantic regularity across Slavic and Romance, but we repeatedly noted that morphosyntactic conditions vary substantially in each language.

Bulgarian shares perfective/imperfective morphological markings on verbs with other Slavic languages, and imperfect/aorist markings with the Romance languages. In this section, Habituals have proven important to address semantic consequences of such 'mixed' or 'double' morphosyntactic characteristics. For the indicative constructions of this section, we have maintained both that Bulgarian encodes IMPF in imperfect and present inflections, and that the perfective/imperfective morphology on verbs also makes an independent semantic contribution. IMPF as representative of Viewpoint aspect always takes high scope over the perfective/imperfective morphology on verb stems, which roughly falls within Situation aspect. Our discussion suggests here and later that the dichotomy Viewpoint/Situation alone is not sufficiently fine grained to capture the complexities of the multiple layers of aspect encoded in Bulgarian verbs, where prefixes must also be added to the equation.

2.2. Ongoing imperfectives

A second family of readings in Bulgarian imperfects shared without variation with other Slavic languages and with Romance is known as ongoing, processual, or progressive and introduced in section 2.2.1. In section 2.2.2 we illustrate constructions with parallel readings in some Slavic and Romance languages. The main features of the analysis we adopt for ongoing readings are summarized in section 2.2.3, where we contrast our unifying philosophy covering various imperfective readings with some prominent proposals specifically interested in capturing ongoing readings.

2.2.1. Bulgarian

Paradigm (21)a–d, with imperfects bolded, illustrates (past) Ongoing imperfective readings (presents also display Ongoing readings). As with Habituals in section 2.1, verbs with both a primary and a secondary imperfective morphology may display this reading, with further semantic nuances that we do not discuss. A secondary imperfective with an imperfect inflection is in (21) e: *izgarjaše*.

- (21) a. Kogato majka mi vleze v stajata mi, Bg
When mother my came.Perf.AOR in room.Def my.CL,
(az) **govorex** s gadžeto mi.
(I) talked.Impf.IMP with boyfriend.Def my.CL
'When my mother came into my room, I **was talking** to my boyfriend.'
- b. Kogato zvānecāt zvānna, (az) **gledax** televizija
When bell.Def rang.Perf.AOR, (I) watched.Impf.IMP TV
'When the bell rang, I **was watching** TV.'
- c. Tja **stroeše** pjasāčen zamāk kogato goljama vālna dojde
She built.Impf.IMP sand castle when big wave came.Perf.AOR
i otmi vsiĉko predi da uspee da dovārši.
and washed.away.Perf.AOR everything before to manage to finish
'She **was building** a sandcastle when a big wave washed it all away before she could finish.'
- d. **Risuvax** esenen pejzaž kogato mi svārši červenoto i ne uspjax da dovārša.
Paint.Impf.IMP fall landscape when me.CL finish.Perf.AOR red.Def and not manage.Perf.AOR to finish
'I **was painting** a fall landscape when I ran out of red and could not finish.'
- e. Kogato Marija vleze v stajata, Ivan veĉe **izgarjaše** mljakoto.
When M. PR.enter.Perf.AOR in room, Ivan already PR.burn.Impf.IMP milk.the
'When Mary entered the room, Ivan was already (in the process of) burning the milk.'

As stated in section 2.1, information source is grammaticalized in Bulgarian. Thus, informants often volunteer that if they had not witnessed the events in (21), the Renarrated Mood in section 5 would be appropriate (*Tja strojala pjasāčen zamāk* ... 'She was reportedly building a sandcastle...' for (21)c, and so on).

2.2.2. Ongoing imperfective readings crosslinguistically

Ongoing imperfectives are common and well known elsewhere in Slavic. Equivalents to (21)a are Ukrainian (22)a for West Slavic, Polish (22)b for East Slavic, and Slovenian (22)c for South Slavic.

- (22) a. Koly moja mama zajshla v moju spalnu, ja **govoryla**
When my mom entered in my bedroom, I talked.Impf
zi svojim hlopcem. Ukr
to my boy.friend
- b. Kiedy moja mama weszła do pokoju, ja **rozmawiałam** z moim
When my mother came in room, I talked.Impf with my
chłopakiem. Pol
boyfriend
- c. Ko je mama stopila v mojo spalnico, sem se **pogovarjala**
When Aux.3sg mother come into my bedroom, Aux.1sg Refl talked.Impf
z mojim fantom.
with my boyfriend Slo
'When my mother came into my room/bedroom, I **was talking** (Impf)
with my boyfriend.'

As stated, the above languages differ in morpho-syntactic details not only from Bulgarian but also from each other, which does not affect the relevant semantics. The Ukrainian past in (22)a is a bare participle that agrees in number and gender with the nominative subject: *govoryla*. The Polish past in (22)b is a compound form with a feminine participle incorporated into an affix-like overt first person 'be'-auxiliary -*m*: *rozmawiała-m*. The Slovenian past in (22)c is periphrastic, with a first person auxiliary in second position detached from a feminine participle, a combination that cannot be identified with a Present Perfect: *sem ... pogovarjala*. Nevertheless, all patterns share the reading we call "ongoing", so are comparable to Bulgarian (21)a with an imperfect.

Other examples are (23)a–c for (21)b, (24)a–c for (21)c, and (25)a–c for (21)e. As before, morphological details differ. Russian resembles Ukrainian with a bare participle. Slovenian encodes a general past in a 'be'-auxiliary in all persons. Czech and Slovak encode general pasts in 'be'-auxiliaries only in first and second persons (again these do not constitute present perfects in contrast with parallel sequences in Bulgarian): Czech (23)b with *jsem*, and Slovak (25)b with *som*, vs. Czech *stravila* in (24)b. To repeat, in Bulgarian similar sequences do not encode general pasts but Indicative present perfects illustrated in section 3, which may contrast with past perfects, which we do not illustrate.

- (23) a. Kogda pozvonili v dver', ya **smotrela** televizor. Rus
When rang in door, I watched.Impf TV
- b. Když přední zvonek zvoněl, ja jsem se **dívala** na televizi. Cz
When front bell rang, I 1sg.Aux Refl looked.Impf on television
- c. Ko je zazvonil hišni zvonec, sem **gledal** TV. Slo
When 3sg.Aux rung house bell, 1sg.Aux watched.Impf TV
'When the (house/front/door) bell rang, I **was watching** TV.'
- (24) a. Vona **buduvala** velykyj zamok z pisku, koly velyka hvylya zmyla vse do Ukr
She built.Impf big castle of sand, when big wave washed all
togo jak vona zmogla zakinchty.
before as she could finish.
- b. Ona **stravila** zámek z písku, když přišla vlna a zničila
She built.Impf castle from sand, when came wave and destroyed
všechno než to mohla zkončit. Cz
everything before it she.could finish
- c. **Gradila** je peščeni grad, pa ga je val odplavil,
Built.Impf 3sg.Aux sand castle, when it 3sg.Aux wave washed.away,
preden je lahko končala.
before 3sg.Aux able finished. Slo
'She **was building** a (big) sandcastle when a (big) wave {washed it
all away / came and destroyed everything} before she could finish.'
- (25) a. Ya **risoval** pejzazh, kak u menya zakonchilas'
I painted.Impf landscape, as to me finished
krasnaya guash, tak ya i ne zakonchil risunok. Rus
red paint, so I and not finished painting
- b. Práve som **maľoval** jesennú krajinku, keď sa mi minula
Just 1sg.Aux painted.Impf fall landscape, when Refl to.me ran.out

- červená farba a nemohla som to dokončiť. SvK
 red paint and not.could Aux.1Sg it finish
 c. **Slikal** sem jesensko krajino, pa mi je zmanjkalo rdeče
 Painted.Impf 1sg.Aux fall landscape, when to.me 3Sg.Aux run.out red
 in (slike) nisem mogel dokončati.
 and (picture) Neg.Aux.1sg able finish. Slo
 'I **was** (just) **painting** a (fall) landscape, when I ran out of red (paint) and could not finish (painting it).'

Romance Ongoing imperfective readings are based on imperfect verbs like in Bulgarian, without primary/secondary morphology, as in (26)a–c (in many Romance languages presents, which we do not illustrate, also display habitual, ongoing, and intentional readings).

- (26) a. Quando a minha mãe entrou no meu quarto, eu **falava** Por
 When the mother my entered in.the my room, I talked.IMP
 com o meu namorado.
 with the my boyfriend
 'When my mother came into my room, I was talking to my boyfriend.'
 b. Quand on a frappé à la porte, je **regardais** la television. Fr
 When someone has knocked on the door, I watched.IMP TV.
 'When they knocked on the door, I was watching TV.'
 c. **Pintaba** un paisaje pero se me acabó el color rojo Sp
 Painted.IMP a landscape but Refl to.me finished the red color
 y no pude acabar.
 and not could finish
 'I was painting a landscape but I ran out of red and I could not finish.'

2.2.3. An analysis of Ongoing imperfective readings

Ongoing readings perhaps constitute the most familiar interpretation of imperfectives. Thus, many current analyses have paid particular attention to this reading, considering it the default interpretation of imperfective forms and contrasting it with prototypical (past) perfective readings. The philosophy that inspires the proposals in this paper seeks to unify several readings in imperfectives, so the ongoing variety is one of the available interpretations that should be placed under a common IMPF able to also accommodate habituais, and less general options such as the factuais of Russian and Polish, the intentionals of Bulgarian and Romance, and the narratives of Romance. To place all those readings under a common umbrella, some prominent assumptions proposed in the literature with emphasis on ongoing readings need to be replaced by an alternative that can accommodate not only ongoing interpretations but also other types.

Within this unifying philosophy, in the proposal adopted in this paper the term 'ongoing' is used for interpretations that involve events that keep happening within the topic situation. From this perspective, [Arregui et al. \(2014\)](#) equip Ongoing imperfectives with the Modal Base in (27) that gives the general IMPF basis of other readings access to all subparts of the topic situation: the domain of quantification consists of all the (relevant) subparts of the topic situation.

$$(27) \quad MB_{\text{ongoing}} = \lambda s. \lambda s'. s' < s.$$

Within the above proposal, in (21)a *When my mother came into my room, I was talking to my boyfriend*, the topic situation encoded in the restrictor is the situation of my mother entering the room, and truth conditions for (21)a are in (28):

$$(28) \quad \begin{aligned} &[[(21)a]]^c, g = 1 \text{ iff} \\ &\forall s': MB_{\text{ongoing}}(s_{\text{my mother enters the room}})(s') = 1, \\ &\exists e: e \text{ is an event of me talking to my boyfriend in } s'. \end{aligned}$$

Two features of the above analysis need mention. The first one introduced in section 2.1.3 in the context of habituais involves the 'size' of situations, which may be less spatially or temporally extended than worlds. The influential analysis of donkey anaphora by [Heim \(1990\)](#), for instance, speaks of minimal (i.e. very small) situations that contain only one donkey. In sections 2.1.1 and 2.1.3 we suggested that the 'large' size of (topic) situations plays an important role in habitual readings. Namely, it allows for the expression of complex semantic relations affecting events morphologically encoded in Bulgarian by means of imperfect/present inflections combined with perfective verb stems. The size of situations also plays

a role in ongoing readings such as (21)a. In contrast with habituais, the topic situation that functions as restrictor in constructions with ongoing readings is relatively ‘small’, so we do not expect Bulgarian perfective imperfects/presents to be licit in the restrictor clause of constructions whose interpretation is primarily ongoing, which is what our data indicate. To support this claim, consider an example suggested by one of our reviewers: *Kogato majka mi vlezеше v stajata, az večno govorex po telefona* ‘When my mother would enter the room, I used to constantly talk/be talking on the phone.’ This sentence contains a prefixed perfective imperfect verb (*v-leze-še*) in the restrictor clause, and a primary imperfective imperfect verb in the nuclear scope/main clause. Overall, its interpretation is clearly habitual/repetitive, with the distributive reading already observed earlier in habitual (5–6): [Each time [mother enter] [I constantly talk on phone]]. Thus, its topic situation is undoubtedly large, as expected. However, this sentence also tells us that the repeated events encoded in the matrix are of the ongoing type. This can be captured with the matrix clause containing an IMPF operator of the ongoing type that is under the scope of the generic IMPF operator that dominates the restrictor clause and the nuclear scope clause. This sentence, then fits well with our proposals. Nevertheless, it also identifies a question already mentioned for habituais. Namely, we may wonder whether the operator characterizing an ongoing imperfective under the scope of a habitual operator should be classed within Viewpoint or within Situation, which is not a problem within situation semantics. To repeat, the complex combinations of morphological aspect in Bulgarian make the dichotomy Viewpoint/Situation seem insufficient. Likewise, traditional perfective/imperfective labels in morphology also seem insufficient when faced with prefixed perfective imperfect verb forms such as *vlezеше*.

The second feature of the above analysis is that it does not rely on the type of inclusion relation typically assigned in the literature to imperfectives when ongoing readings are under consideration.¹⁷ Recall that imperfective/perfective viewpoints are often contrasted in terms of temporal inclusion relations (Klein, 1994; Smith 1997; Kratzer, 1998; Paslawska and von Stechow, 2003; Pancheva, 2003, among many others). On this view, in imperfectives Reference or Topic Time is included within, or coincides with, the time at which the event described by the sentence occurs, or Event Time. Perfectives express the opposite relation, with Event Time included in the Reference/Topic time. If the inclusion relation where the Topic Time is included in the Event Time is applied to (21)a, for instance, the intuition is that the event of my talking ‘surrounds’ the event of my mother entering the room: the talking event holds throughout the time it takes my mother to enter the room.

The proposal for IMPF in (18) fits within alternative approaches that do not adhere to this type of inclusion view (and see Cipria and Roberts (2000) and Ippolito (2004), among others for similar views). It does not establish a direct relationship between the topic situation (similar to the Reference/Topic time) and the time of the event, but requires that the relevant sub-situations of the topic situation include or contain the event described by the VP.

We think that the goal of unifying the various readings that imperfectives display in Bulgarian, other Slavic languages and the Romance languages within a common umbrella is desirable. The imperfective inclusion view described above may be suitable for ongoing readings, but we propose to substitute it for the alternative in (27) because it does not properly characterize readings that include Factual past imperfectives for past complete events in Russian and Polish in section 3, Intentional Indicative Imperfects for past plans in Bulgarian and Romance in section 4, and Intentionals with imperfective stem morphology in the Bulgarian evidential paradigm in section 5. In all these cases, the inclusion analysis that serves for Ongoing imperfectives will not be applicable because in such readings the topic or reference time/situation is not included in, nor coincides with, the time of the event.

Before we show how the analysis adopted here for IMPF captures the properties of Factual imperfectives in section 4 and Intentional imperfects in section 5, we partially recall the discussion of Arregui et al. (2014), in order to show how the semantics of IMPF adopted in this paper can also characterize the Ongoing imperfectives of this section. As stated, in the proposal adopted here, the imperfective inclusion relation is not directly required by the truth-conditions in (28), which only care about the topic situation. Instead, the proposal concentrates on the topic situation, stating that it contains the VP-event. As we stated above, the topic situation in ongoing readings is small. Thus, the only eventualities small enough to fit into small topic situations are those that are very homogeneous or fine-grained. Namely, if in (21)a all subparts of the situation of my mother entering the room are situations in which I was talking to my boyfriend, it is likely that I was talking to him before my mother came in. But, in small topic situations as in (21)a, it will also be natural to find homogeneous eventualities overflowing the topic situation, and expanding past its borders. This will give rise to the intuition that the temporal location of the topic situation is included within the temporal location of the event, the classic characterization of imperfective viewpoint in discussions of Ongoing readings. Habituais in section 2.1 involve quantification over normal/characteristic subparts, so they are a special case of Ongoing readings in this section. As a result, with very small topic situations as in (21)a (i.e. my mother coming into the room), it is not usually possible to distinguish between regular subparts and characteristic subparts, in which case, a habitual reading will not arise.

¹⁷ One of our reviewers notes that the inclusion analysis is usually proposed for ongoing readings, not other readings. But see Ferreira (2005), who develops an inclusion analysis that accommodates ongoing and habitual readings, differentiating the second from the first by means of plural VPs.

In sum, Bulgarian imperfects (or presents) share, without variation, ongoing readings with imperfective verbs elsewhere in Slavic and with imperfect and present verbs in Romance. The analysis adopted in this paper seeks to unify these familiar readings with sometimes less familiar readings in our languages. The proposal to achieve such a unification consists in assuming that IMPF in ongoing readings associates with a MB that mentions as domain of quantification all subparts of the topic situation, and does not involve an inclusion relation where the Topic time/situation is included in the Event time/situation.

3. Imperfective variation I: factuais

In section 3.1, we introduce so-called Russian and Polish Factual imperfectives (not to be confused with the label 'general factual'). In section 3.2, we establish step-by-step contrasts with Bulgarian Indicative verbs, showing that counterparts to so-called Russian and Polish Factuals are encoded in Aorist or Present Perfect constructions with both perfective or imperfective verbs. For the sake of completeness, in section 3.3, we outline an analysis for Factuals in Russian and Polish so as to identify the source of variation with Bulgarian within our hypothesis that IMPF has a fixed (partial) semantic content, but different conditions on its domain of quantification.

Let us introduce the properties of Factual imperfectives in East and West Slavic in the specific sense this label is used in this paper as a basis for comparison with Bulgarian. A perfective-like use of verbs with past imperfective form in at least Russian and Polish allows reference to a completed event, and has been compared to English experiential Perfects, as in *John has been to Sophia* (Borik, 2002, 2006; Grønn, 2003 on Russian, Fraćkowiak, 2011 on Polish).¹⁸ This use is known under Russian labels that include *Obshchefakticheskoe znachenie* (Maslov, 1959) and *Konstatacija fakta*, and English labels such as *Factual* (Padučeva, 1992), *Statement-of-Fact*, and *General Factual*. The reader should keep in mind that we reserve the Factual label for the specific use that alludes to a completed event.

(29) a. Lena (uže) **prinimala** eto lekarstvo. Rus
Lena (already) took.Impf this medicine
'Lena has (already) taken this medicine.'
(Kagan, 2007)

b. Petja uže **peresekal** etot kanal za polčasa.
Peter already crossed.Impf this canal in half.an.hour
'Peter has already crossed this canal in half an hour.'
(Borik, 2002)

¹⁸ For earlier references see the list in [Padučeva \(1992\)](#). Recent work on Factuals includes a comparative study that unifies Bulgarian with Russian ([Dickey, 2000](#)) (here we take the opposite position, and distinguish between the two languages), [Borik \(2002, 2006\)](#), [Grønn \(2003\)](#), and [Altshuler \(2012\)](#) on Russian, and [Bacz \(2008\)](#) and [Frąckowiak \(2011\)](#) on Polish. [Bacz \(2008\)](#) notes that Polish and Russian differ as to the specific verbs allowed in well-formed Factual constructions. We claim that Bulgarian altogether lacks Factuals, but in section 3.3 we suggest how lexical differences between Russian and Polish Factuals could be captured within our framework.

- (30) a. Marcin **malował** już obraz. Pol
 Marcin painted.Impf already picture
 'Marcin already painted a picture.' (Frąckowiak, 2011)
 b. (Kiedyś) **czytałem** tę książkę.
 (Once) read.Impf.1Sg that book
 'I have read that book.' (I read it on some occasion in the past.) (Bacz, 2008)

Interrogatives¹⁹ may also display Factuals as in (31)a–c, and polarity items make their completion flavor salient (for additional examples see section 3.2).

- (31) a. Ti kogda-nibud' **razbival** cennuju vazu? Rus
 You ever PR.broke.Impf valuable vase?
 'Have you ever broken a valuable vase?' (Padučeva, 1993)
 b. Czy kiedykolwiek **rzuciłeś** dziewczynę? Pol
 Q ever throw.Impf.2Sg girlfriend
 'Have you ever broken up with a girlfriend?' (Frąckowiak, 2011)
 c. Czy ktoś (już) **dzwonił** na policję? Pol
 Q anyone (already) called.Impf to police?
 'Has anyone called the police (yet)?' (Bacz, 2008)

The reading we call Factual is illustrated in (29)–(31) and is only available to past telic verbs of the Vendlerian accomplishment and achievement types (Vendler, 1967) and, to repeat, presents events as completed (so should not be confused with a traditional 'general factual'). Sentence (29)a, for instance, reports that the result of taking the medicine was achieved in the past.

For Padučeva (1992), such Russian Factuals are resultative, emphasize that something has actually happened, have a retrospective point of reference, do not order the time of the action with respect to a specific time, and may report multiple events, as in (32) from Borik (2006). This example speaks of two episodes when crossing the canal was completed: one on Monday, and one on Tuesday.

- (32) Petja uže **peresekal** etot kanal v ponedel'nik i vo vtornik. Rus
 Peter already crossed.Impf this canal on Monday and on Tuesday
 'Peter has already crossed this canal on Monday and on Tuesday.'

With the above symptomatic characteristics of Russian Factuals²⁰ in mind, in section 3.2 we offer a step-by-step comparison with Bulgarian to conclude that there are no Factual imperfectives in the indicative mood of this language. In other words, Bulgarian imperfect verbs cannot encode a past complete event, so they differ from the past imperfective verb forms of Russian depicted in this section.

3.2. Comparing Bulgarian to Russian and Polish

In Russian and Polish Factual imperfectives in section 3.1, events take place in the past and are complete. We provided arguments in section 2.1 that in the Bulgarian indicative mood imperfective readings for the past are morphologically encoded in imperfect inflections and not in the imperfective morphology of the verb stem. Using this diagnostic, we show next that Bulgarian lacks factual readings for its imperfectives -cannot use imperfects for this

¹⁹ An (often unstated) assumption is that interrogative Factuals express a proposition that is the appropriate or expected answer to a question.

²⁰ The 'factual' label may also be informally applied to Habituals, which we saw in section 2.1 are 'actual'. For instance, Israeli (1996: 65) as cited in Frąckowiak (2011) applies the label 'Factual' to Russian *Kto daril tufli?* 'Who gave (Impf) shoes [as a gift]? However, this sentence displays an atelic VP, and could correspond to a Habitual like the Bulgarian and Romance imperfects in (i.a–b); these report on a general state of affairs, and inquire about the characteristic person who was in charge of giving shoes as a gift.

- (i) a. Koj **darjavaše** obuvki? Bg
 Who gave.Impf.IMP shoes
 b. Quién **daba** zapatos? Sp
 Who gave.IMP shoes
 'Who used to give / donate shoes?'

To repeat, in our view Bulgarian lacks Factuals, but shares with Russian the Habituals in section 2.1. See also footnote 33.

purpose-, and reports on past culminated events with present perfects or aorists, which, roughly speaking, we characterize as (semantically) perfective (i.e. PERF).

We noted in section 3.1 that constructions with past imperfective accomplishment verbs and adverbs such as *already* are typical contexts for factual readings in Russian and Polish: (29)b glossed ‘Peter has already crossed this canal in half an hour.’ Bulgarian constructions with parallel experiential readings are in the present perfect (glossed as PRF) in (33)a–b.²¹ Participles in these cases are morphologically imperfective, but we will see below that morphological perfective participles are also possible.

- (33) a. Petăr veče **e presičal** tozi kanal za polovin čas. Bg
 Peter already Aux cross.Impf.Ppl.PRF this canal for half hour.
 ‘Peter has already crossed this canal in half an hour.’
 b. Petăr veče **e izkačval** Černi Vřăx za polovin čas.
 Peter already Aux climb.Impf.Ppl.PRF Black Peak in half hour.
 ‘Peter has already climbed up Black Peak in half an hour.’

Oversimplifying, we assume that Bulgarian present perfect periphrases of type (33)a–b count as semantically ‘perfective’, or contain a PERF operator opposed to IMPF, which c-commands or scopes over the remainder of the syntactic structure, as before. The crucial difference between Bulgarian (33)a–b and Russian Factuals such as (29)b then is that the Bulgarian sentences lack IMPF (encoded in the imperfect), again irrespective of the perfective/imperfective morphology of the verb stem.

We saw in section 3.1 that Russian and Polish Factuals may be undefined as to the number of events they report. Bulgarian present perfects share this characteristic, so are suitable for multiple events, as (34) corresponding to Russian (32) now illustrates.

- (34) Petăr veče **e presičal** tozi kanal v ponedelnik i văv vtornik. Bg
 Peter already Aux cross.Impf.Ppl.PRF this canal on Monday and on Tuesday.
 ‘Peter has already crossed this canal on Monday and on Tuesday.’

Present perfects may also encode one-time complete events when their verb displays perfective morphology, as in (35). This is an interesting topic we do not further explore (but see [Pancheva, 2003](#) for an analysis), another case that brings to mind hierarchical structural layers of aspect.

- (35) Petăr veče **e izkačil** Černi Vřăx za polovin čas vednuzh. Bg
 Peter already Aux climb.Perf.PRF Black Peak in half hour once
 ‘Peter has already climbed up Black Peak in half an hour once.’

By contrast with present perfect (33)–(35), the secondary imperfective imperfect *izkačvaše* in (36) cannot felicitously report a one-time climbing event completed in the past. We could dub the verb in (36) a ‘double’-imperfective, as it combines the imperfect inflection *-še* with the secondary imperfective marker *-va*. However, the reading of the construction is nevertheless not factual in the sense discussed in this section and illustrated by Russian and Polish earlier.

- (36) #Petăr veče **izkačvaše** Černi Vřăx za polovin čas. Bg
 Peter already climbed.Impf.IMP Black Peak in half hour.
 ‘#Peter has already climbed up Black Peak in half an hour.’

If *veče* ‘already’ is removed from (36), as in (37)a, the sentence can be a felicitous Habitual with the analysis in section 2.1. It reports a (main clause) generalization on (repeated) telic events encoded in the VP: it was characteristic for Peter to climb Black Peak in half an hour. A habitual reading is also natural with *predi 20 godini* ‘twenty years ago’ in (37)b. As noted in section 2.1, such adverbial expressions function as restrictors within the tripartite structure of IMPF, and identify (topic) situations large enough to accommodate a habitual reading. Again, such a reading is not ‘factual’ in the sense relevant for this section.

²¹ Note that for simplicity, we gloss the Present perfect tense as PRF on verbs, although the it is signaled by a present auxiliary and a participial verb form; the PRF gloss is meant to apply to the whole complex.

- (37) a. Petăr **izkačvaše** Černi Vrš za polovin čas. Bg
 Peter climbed.Impf.IMP Black Peak in half hour.
 'Peter used to climb Black Peak in half an hour.'
 b. Predi 20 godini Petăr **izkačvaše** Černi Vrš za polovin čas.
 Ago 20 years Peter climbed.Impf.IMP Black Peak in half hour.
 'Twenty years ago Peter used to climb Black Peak in half an hour.'

For the sake of completeness, equivalents for Polish Factuals with telic VPs and accomplishment verbs in (30)a–b in section 3.1 are Bulgarian (38)a–b. Sentence (38)a with a prefixed aorist expresses a single, completed, specific event, so corresponds to what Maslov (1959, 1981) labels a *konkretno-faktičeskoe značenje* (a concrete-factual meaning). By contrast, (38)b contains a present perfect with an imperfective participle. We do not claim that aorists and present perfects are synonymous in Bulgarian (see Pancheva, 2003 for a recent discussion on their differences). The point we are making is that the defining factor for completion readings in Bulgarian is not encoded in the imperfect tense, nor in the imperfective (or perfective) morphology on the verb, but in the aorist or the perfect tenses.²²

- (38) a. Martin veče narisuva edna kartina. Bg
 Martin already drew.Perf.AOR one picture
 'Martin already painted a picture.'
 b. Čel sâm (njakoga) тази kniga.
 Read.Impf.Ppl.PRF Aux (once) this book.
 'I have read that book (once).'(I read it on some occasion in the past.)

Recall that we saw in section 3.1 that Russian Factuals are not restricted to one-time events, but in typical contexts with achievement verbs they report on such type of event, as in (39), which Dickey (2000) borrows from (Rassudova, 1968: 88). We may then wonder about sentences with completion readings equivalent to (39) in Bulgarian. Those cannot display the imperfect, the crucial point, but must appear in the perfect or the aorist, as in (41).

- (39) Odnazdy on uže **polučal** vygovor za opozdanie. Rus
 Once he already received.Impf reprimand for lateness
 'He (has) already once received a reprimand for being late.'

Arregui et al. (2011) mention in passing that Bulgarian lacks Factuals, and compare (39) to the Bulgarian paradigms in (40)a–b and (41)a–d. Again, such a comparison demonstrates that Bulgarian expresses the completion reading of a Russian Factual²³ via some form of PERF operator, not via constructions with an IMPF operator. Examining (40)a–b in more detail, both verbs are in the imperfect. While in (40)a, the verb is a secondary imperfective, in (40)b it is perfective, offering the type of imperfect-perfective *vid* morphology combination discussed in sections 1.1 and 2.1.1. Nevertheless, neither (40)a nor (40)b is suitable to express the intended completion reading of having received a past reprimand *in toto*.

- (40) a. *Vednăž toj veče **polučavaše** zabeležka za zakăsnenie. Bg (Imperfective Imperfect)
 Once he already receive.Impf.IMP remark for tardiness
 b. *Vednăž toj veče **polučeše** zabeležka za zakăsnenie. (Perfective Imperfect)
 Once he already receive.Perf.IMP remark for tardiness
 'He (has) already received a reprimand for being late once.'

²² Maslov (1959, 1981) is a traditional source on contrasts between present perfects and aorists, and effects of perfective/imperfective aspect on both, and Pashov (1989) is a traditional source for a resultative character in present perfects. By contrast, the Bulgarian tradition does not view imperfects as resultative, an implicit difference with proposals on Russian past imperfectives in this section.

²³ Bacș (2008) marks Polish (i.b), which is equivalent to Russian (39), as ungrammatical and considers the perfective counterpart in (i.a) well-formed. Before we conclude this section, we suggest in passing how such a lexical variation could be accommodated in the framework that we adopt in this paper.

- (i) Raz już {a.dostał /b.*dostał} nagane za spóznienie. Pol
 Once already {a. received.Perf/ b. *received.Impf} reprimand for lateness
 'He has already once received a reprimand for being late.'

In Bulgarian, then, completion meanings rely on the equivalent of a PERF operator²⁴ encoded in either aorists or perfects. In (41)a–d we illustrate different grammatical, albeit not necessarily identical semantic ways, to express such readings in main clauses.

- (41) a. Vednāž toj veče **polučava** zabeležka za zakāsnenie. Bg (Imperfective Aorist)
 Once he already receive.Impf.AOR reprimand for tardiness
 b. Vednāž toj veče **polučī** zabeležka za zakāsnenie. (Perfective Aorist)
 Once he already receive.Perf.AOR reprimand for tardiness
 c. Vednāž toj veče **e polučaval** zabeležka za zakāsnenie. (Imperfective Perfect)
 Once he already Aux receive.Impf.PRF reprimand for tardiness
 d. Vednāž toj veče **e polučīl** zabeležka za zakāsnenie. (Perfective Perfect)
 Once he already Aux receive.Perf.PRF reprimand for tardiness
 All a-d: 'He (has) already once received a reprimand for being late.'

In more detail, the verb in (41)a is a secondary imperfective in the aorist, while (41)c displays a secondary imperfective verb in the present perfect; perfective verbs are those in (41)b and (41)d. Once again, the combinations in (41)a–d result in the type of Viewpoint (Smith, 1991) dubbed 'perfective' in the literature.

A third context for Factuals is questions, as in (42)b, adapted from Rassudova (1968).

- (42) a. Krasivo ukasili elku. Rus
 beautifully decorated.Perf spruce
 'They decorated the Christmas tree beautifully.'
 b. Kto **ukrašal**?
 Who decorated.Impf
 'Who (has) decorated (it)?'

In Bulgarian, suitable equivalents are 'perfective', as in (43)b–c, with an object making the telic nature of the VP patent.²⁵ Verbs may be in the present perfect as in (43)c, or the aorist as in (43)b, both with perfective morphology (but not with totally identical readings) (imperfective morphology was already illustrated and is illustrated again later, so perfective morphology is not the defining factor in this case either). An answer in the imperfect (with a secondary imperfective verb) as in (43)d, however, does not convey a reading of culmination and is understood to report the decorating process (i.e. does not contain a Factual in the intended sense). Thus, the answer in (43)d is infelicitous. Recall that perfective imperfects are ungrammatical in main clauses and restricted to adjunct clauses functioning as restrictors (see section 2.1), so an imperfective imperfect is the only grammatical option in this case.

²⁴ Alternatively, Pancheva (2003) argues that unprefixated aorists signal Neutral Viewpoint. On this view, Neutral differs from IMPF in being able to express completion readings.

²⁵ If telicity is not indicated, some Russian past imperfectives may be general statements that correspond to felicitous imperfects in Bulgarian (or Romance, which lacks bona fide Factuals). For instance, Altshuler (2010: 44) cites (i.b) from Forsyth (1970: 86) as a Factual. Without overt object, (i.b) may correspond to Bulgarian imperfect (ii.b), which reports on a general writing method, and remains silent about letter-completion: I wrote in pencil (not with a pen). Spanish (iii) is parallel. In our approach, (ii.b–iii) contain IMPF with an Ongoing MB as in section 2.2 (process of writing), or a Generic MB as in section 2.1 (writing method).

- (i) a. V ètoj porternoj ja napisal pervoe ljubovnoe pis'mo k Vere. Rus
 In this tavern I wrote.Perf first love letter to Vera
 'In this tavern, I wrote my first love letter to Vera.'
 b. **Pisal** karandaš-om. (Forsyth, 1970: 86)
 Wrote.Impf pencil-Inst
 'I wrote it in pencil'
 (ii) a. V tazi mexana napisax pàrvoto ljubovno pismo do Vera. Bg
 In this tavern wrote.Perf.AOR first.Def love letter to Vera
 'In this tavern I wrote the first love letter to Vera.'
 b. Pišex s moliv.
 wrote.Impf.IMP with pencil
 (iii) **Escribía** con lápiz. Sp
 Wrote.IMP with pencil
 Both Bg and Sp: 'I was writing it in pencil' (ongoing) or
 'I wrote in pencil (at that time)' (generic)

- (43) a. Ax, kolko krasivo sa ukasili elxata. Bg
 Wow, how beautifully Aux decorate.Perf.Ppl.PRF spruce
 'Wow, they have decorated the Christmas tree so beautifully.'
 b. Koj ja **ukrasi**?
 Who it.CL decorate.Perf.AOR
 'Who decorated it?'
 c. Koj ja **e ukrasil**?
 Who it.CL Aux decorate.Perf.Ppl.PRF
 Who has decorated it?
 d. #Koj ja **ukrasjavaše**?
 Who it decorate.Impf.IMP
 #'Who was decorating it?'

For the sake of completeness, Bulgarian questions for Russian and Polish (31)a–b in section 3.1 are given in (44), with a present perfect and either a primary or a secondary imperfective verb.²⁶

- (44) a. **Čupil / sčupval** li si njakoga cenna vaza? Bg
 Break.Impf.Ppl.PRF / PR.break.Sec.Impf.PRF Q Aux ever valuable vase.
 'Have you ever broken a valuable vase?'
 b. **Kāsal / skāšval** li si njakoga s gaže?
 Tear.Impf.Ppl.PRF / PR.tear.Sec.Impf.PRF Q Aux ever with girlfriend
 'Have you ever broken up with a girlfriend?'

To conclude, less symptomatic examples such as (45) are often used to illustrate Factuals in Russian. Again, the intended reading is naturally rendered into Bulgarian by present perfect (46)a, while a reading reporting on a habitual reader of *War and Peace* in imperfect (46)b belongs among Habituals in section 2.1. To repeat, in a main clause, the verb must display imperfective morphology. However, adding a restrictor clause, as in section 2.1.1, embedded perfective imperfect verbs with an iterative habitual interpretation are possible.

- (45) Vanja **čital** *Vojnu i mir*. Rus
 Vanja read.Impf.Past War and peace
 'Vanja has read *War and Peace*.'
 (46) a. Ivan **e čel** *Vojna i mir*. Bg
 Ivan Aux read.Impf.Ppl.PRF War and Peace
 'Ivan has read War and Peace.'
 b. Ivan **četeše** *Vojna i mir*.
 Ivan read.Impf.IMP War and Peace
 'Ivan {used to / was a habitual reader of / was in the process of reading} War and Peace.'

In this section we argued that Factual imperfectives are not found in the Bulgarian indicative mood. This, then, demonstrates variation internal to the Slavic family, with Russian and Polish differing from Bulgarian. In section 3.3, we briefly introduce a proposal that captures such a variation within our program, and in section 5 we address the parallel situation in the Renarrated Mood, which also lacks Factuals.

3.3. A sketch of an analysis for Factuals in Russian and Polish

Bulgarian lacks Factuals, but for the sake of completeness we summarize the essential details of an analysis proposed within the framework of this paper (see Arregui, 2014 for further comments, and Altshuler, 2012; Grønn, 2003; Frąckowiak, 2011; among others, for recent alternative analyses). Arregui et al. (2014) argue that in Factual Imperfectives in Russian and Polish, IMPF shares the denotation provided in (18) in this paper, and propose that this quantifier associates with a MB that is resultative. We refer interested readers to the cited article for justification and

²⁶ Note that examples (44)a–b would be ungrammatical with perfective participles *sčupil* or *skāsal* for independent reasons: the requirements of polarity *njakoga* 'ever'. Without this item and a definite NP object, perfective participles are a grammatical option. We tentatively assign the contrast to Situation Aspect within VP, not to Viewpoint Aspect (i.e. IMPF and PERF).

details, but what is important for our purposes is that IMPF does not associate with such a resultative MB in Bulgarian. Thus, imperfect inflections are not the appropriate morphology to express the relevant past readings of completion in this language.

According to Arregui et al. (2014), in Russian and Polish Factuals the topic situation contains the consequences of the event, and the situations quantified over contain the event, as in (47).

- (47) $MB_{\text{Resultative}} = \lambda s. \lambda s'. s \text{ results from } s'$,
 where for any two situations s and s' , $s \text{ results from } s'$ iff s includes the consequences/results of the events in s' .

On this view, in Russian (29)a glossed as *Lena has already taken this medicine*, IMPF is restricted to quantify over situations that have result-states in the topic situations, with (48)a receiving the truth conditions in (48)b.

- (48) a. $[past_1 \text{ IMPF } [Lena \text{ takes this medicine}]]]$
 b. $[[29a]]^{g, c} = 1$ iff
 $\forall s': MB_{\text{Resultative}}(s_1)(s') = 1$,
 $\exists e: e \text{ is an event of Lena taking this medicine in } s'$.

Thus, (29)a will be true iff all situations that have consequences in the topic situation include an event of Lena taking this medicine. If the topic situation is a past situation of Lena having felt better, for example, this will be true iff this was the result of her having taken the medicine.

According to Arregui et al. (2014), the semantic skeleton for IMPF in (18) combined with (47) captures many properties noted for Factuals in the literature on Russian, so we briefly list them here. These include that the events reported are not tied to a definite point in time, since the claim is about the resulting situation, not the originating event. That something truly happens in Factuals (in (29)a Lena did actually take her medicine) is captured in (48) by considering that the *result*-relation holds between situations in the same world, not in different worlds. IMPF as a universal quantifier also contributes to the resultative character of Factuals; if the topic situation were not the result of Lena taking this medicine, the sentence would be false (i.e. if Lena felt better for other reasons).

We add that the above analysis could also accommodate lexical variation by imposing further restrictions on Situation Aspect. Recall that Bacz (2008), for instance, finds that the precise verbs that can participate in felicitous Factual constructions with the relevant completion reading are not the same in Polish and Russian. If Russian and Polish share IMPF and the Resultative MB above, then the embedded predicate/VP could be the site of further lexical restrictions on verbs assigned to the realm of Situation Aspect, thus capturing differences between Russian and Polish at a lexical not an inflectional level.

To conclude, in this section, we identified one area where Bulgarian imperfectives differ from those in Russian and Polish. In section 4 we explore one instance where Bulgarian resembles the Romance family while contrasting with most Slavic languages.

4. Imperfective variation II: Intentionals

This section continues our study of semantic variation, setting Bulgarian against the background of imperfective readings usually called 'modal'²⁷ (those that allude to possible worlds) finding similarities with Romance.

Our first step in section 4.1 is a general overview of so-called modal readings, using an Italian inventory as a descriptive framework for a crosslinguistic comparison. Our main focus in this section will be on a meaning we dub **Intentional** following Cipria and Roberts (2000), where we claim there is variation internal to Slavic. Intentionals, also known as 'futate', 'of planning', or 'prospective', among other terms, report on (past) plans and schedules for future events without commitment to their materialization in the actual world. They are known to be common in Romance, and in section 4.2 we argue that they are 'grammaticalized' in Bulgarian and appear in three syntactic contexts, while they are very restricted or absent elsewhere in Slavic.

²⁷ We view IMPF as a **modal** operator, so all imperfective readings involve modality/modal displacement in our approach. In this section, we use the label 'modal' in the traditional sense that establishes a contrast between (a) the ongoing reading in section 2.2, which is called *actual* as it alludes to events in the 'real / actual world', and (b) the various readings introduced in this section, which involve possible worlds. Notice, however, that habitual readings are found in all our languages, and crisscross actual and possible worlds, as noted in section 2.1. Also, imperfective readings that fall under the 'imperfective paradox', which we dub *Conatives*, are general in our languages and their common analysis is a modal one.

We find proposals in the literature that reduce Intentionals to Ongoing imperfectives of the type in section 2.2 or to Conatives. Conative is a traditional label applied to imperfectives that allude to unsuccessful attempts or events-in-progress that fail to reach a successful completion in the actual world, and we show that they are general in both Romance and Slavic, so display no variation. Here we argue that there are reasons to distinguish Intentional Imperfectives from both Ongoing Imperfectives and Conative Imperfectives. We conclude in section 4.3 by sketching an analysis borrowed from Arregui et al. (2014), which distinguishes between Ongoing, Conative, and Intentional Imperfectives, and captures the variation observed in the last type.

4.1. A general landscape for modal imperfective readings

Romance is famous for an inventory of so-called ‘modal’ readings for Imperfects extensively mentioned in the literature.²⁸ In order to establish a descriptive frame for comparison with Slavic and thus Bulgarian, we use as point of departure the list given for the Italian *imperfetto* in (Bazzanella, 1990), noting that other Romance languages seem similar, as our illustrations will suggest.

Let us survey the *eight* modal readings for the Italian *imperfetto* given by Bazzanella (1990), beginning with those that seem characteristic of Slavic imperfectives as well. A first reading of the *imperfetto* with close counterparts in Slavic imperfectives is the type called *Oniric*, which alludes to past dreams. We illustrate it with Spanish (49) for Romance, and (50)a–c for Bulgarian and for Ukrainian and Polish as representatives of West and East Slavic respectively, but do not further discuss it.

Context: What did you dream last night?

- | | | |
|------|--|-----|
| (49) | (Yo) vivía en Egipto y navegaba por el Nilo. | Sp |
| | (I) lived.IMP in Egypt and sailed.IMP on the Nile | |
| (50) | a. Bjax kralicata na Egipet i živeex v pustinjata. | Bg |
| | Was.IMP queen.Def of Egypt and lived.Impf.IMP in desert.Def | |
| | ‘I was the queen of Egypt and lived in the desert.’ | |
| | b. Ya meshkav u Egipti i plavav pid parusom po Nilu. | Ukr |
| | I lived.Impf in Egypt and swam.Impf under sail on Nile. | |
| | ‘I lived in Egypt and sailed on the Nile.’ | |
| | c. Byłam egipską królową i mieszkalam na pustyni. | Pol |
| | Be.Past.Fem.1Sg. Egyptian queen and lived.Impf on desert | |
| | ‘I was the queen of Egypt and lived in the desert.’ | |

A second reading in the modal group that seems general in Slavic and will prove important for our purposes alludes to unsuccessful attempts, and is traditionally known as *Conative*: (51)–(52). We will discuss this reading using its traditional label in section 4.3 from the perspective of the Imperfective Paradox, and will distinguish it both from the ongoing type in section 2.2, and from the Intentional type, which is our main interest in this section.²⁹

- | | | |
|------|--|----|
| (51) | Le chien traversait la route, quand il s’est fait écraser par un autobus. | Fr |
| | The dog crossed.IMP the street when he Refl was made run.over by a bus | |
| | ‘The dog was crossing the road when he was crushed by a bus.’ | |

²⁸ Other than traditional and descriptive grammars, see the recent papers on French in (Labeau and Larrivé, 2005 and references therein); for Italian see Bazzanella (1990) and references therein, Ippolito (2004), and Giorgi and Pianesi (2001, 2004); for Spanish see Rodríguez (2004) and references therein, among numerous others.

²⁹ Conatives have long attracted attention in grammatical traditions that can be traced back to at least the study of Classical Greek. Maslov (1959: 256) defines Bulgarian *conatives* (*imperfectum de conatu*) as unsuccessful attempts to achieve something, with (i) as an example (English glosses and translations are ours). Similar examples are often cited in the context of Classical and New Testament Greek. For Conative imperfectives in Russian see Forsyth (1970: 71ff), among many others.

- | | | |
|-----|---|----|
| (i) | I sto leva bakšiš mu davaše ... Vze li gi? ... | Bg |
| | And hundred leva tip him.CL gave.Impf.IMP... Took.Perf.AOR Q it...? | |
| | ‘And he was giving him a hundred leva tip ... Did he take it?’ | |
| | Ne, ne gi vze, ama davaše mu gi čovekāt | |
| | No, neg it.CL took, but gave.Impf.IMP him.CL it man.Def | |
| | ‘No, he did not take it, but the man was giving it to him.’ | |

- (52) a. Kučeto **presičase** pătja, kogato avtobusăt go blăsna. Bg
 Dog.Def crossed.Impf.IMP road, when bus it.CL ran.over.Perf.AOR
 b. Pies **przechodził** przez ulicę i został uderzony przez autobus. Pol
 Dog crossed.Impf across street and was.struck by bus
 c. Sobaka **perebegala** dorogu kogda na nejo naexal avtobus. Rus
 Dog crossed.Impf road when to him run.over bus
 ‘The dog **was crossing** the road/street when it was run over by a bus.’

Other modal readings listed for the *imperfetto* seem less general in Slavic, with Bulgarian nevertheless displaying several parallelisms with Romance. We postpone to section 4.2 illustration and discussion of readings such as those in (53), which Bazzanella calls *of planning*, and (54) called *epistemic-doxastic*. Our claim is that similar readings, which we unify under the label *Intentional*, are found in Bulgarian, exist under rather restricted conditions elsewhere in South Slavic, and seem altogether absent in East and West Slavic.

- Context:* Non puoi farlo domani? It
 You cannot do it tomorrow?
 (53) Domani **andavo** in biblioteca.
 Tomorrow I.went.IMP in library
 ‘Tomorrow I was going to the library.’
 (54) Che cosa c’**era** domani al cinema?
 What thing it was.IMP tomorrow at.Def cinema?
 ‘What was there tomorrow at the movies?’

Bulgarian Imperfects share two additional readings also found in Romance, which do not seem to occur with past imperfectives elsewhere in Slavic: the one called *Potential* and the one called *Hypothetical*, which we illustrate in (55) and (56) but do not further discuss. The label *Potential* is for modal verbs inflected in the Imperfect, illustrated in Spanish in (55) a. These also exist in Bulgarian, as in (55)b, but, naturally, not in the Slavic languages that lack the Imperfect Tense.

- (55) a. Juan debía trabajar Sp
 John had.to.IMP work
 ‘John had to work.’
 b. Ivan **trjabvaše** da sviri. Bg
 Ivan had.to.Impf.IMP play
 ‘Ivan had to/would play.’

The label *Hypothetical* applies to Imperfects that appear in conditional constructions, which display variation in Romance. On the one hand, in Italian (Ippolito, 2004), Spanish, and Romanian, Imperfects are well formed in both antecedent and consequent clauses, as illustrated via Spanish in (56)a where a conditional with future reference contains Imperfects in antecedent and consequent clauses. By contrast, in French a conditional is always required in the consequent clause (Anand and Hacquard, 2009; among others). Bulgarian resembles Italian, Romanian and Spanish in this respect, as illustrated in (56)b,³⁰ while other Slavic languages require obligatory conditional auxiliaries/particles in similar contexts. Thus, conditional constructions display variation both in Slavic and Romance.

- (56) a. Si el profesor **daba** el examen mañana, Juan **suspendía**. Sp
 If the teacher gave.IMP the exam tomorrow, John failed.IMP
 ‘If the teacher gave the exam tomorrow, John would fail.’
 b. Ako profesorăt **dadeše/provedeše** izpita utre, Ivan **zagivaše**. Bg
 If professor.Def gave/hold.Perf.IMP exam.Def tomorrow, Ivan died.Impf.IMP
 ‘If the professor gave the exam tomorrow, Ivan {was dead = going to be in trouble}.’

In addition, Romance Imperfects display (*Pre*)*ludic* readings for future role-playing, as in (57)a, and *Polite* readings as in (57)b. Neither seems possible in Slavic.

³⁰ Bulgarian conditional constructions with imperfect verbs in both the antecedent and the consequent clause were also illustrated in section 2.2.1 in the context of habituais, as if-clauses constitute one of the syntactic contexts for perfective imperfects in this language.

- (57) a. Giochiamo ad un gioco nuovo! Io **ero** l'albero, tu il cavallo It
 Let's play a new game! I was.IMP the tree, you the horse. (Ippolito, 2004)
 'Let's play a new game! (Let's pretend that) I am a horse and you are a tree'
 (our gloss)
- b. Por favor, **quería** un vaso de agua. Sp
 Please, I like.IMP a glass of water.
 'I would like a glass of water, please.'

To conclude our survey of readings for imperfectives dubbed 'modal' in the Romance tradition, *Onirics* for past dreams, and *Conatives* for unsuccessful attempts are general in Slavic and Romance. *Intentionals* are found in Bulgarian, but have a limited distribution elsewhere in Slavic. Bulgarian shares *Potentials* with Romance, and displays *Hypotheticals* under conditions reminiscent of Italian, Romanian, and Spanish, but not French,³¹ but both types seem absent elsewhere in Slavic. (*Prejudic* and *Polite* readings seem absent in Slavic.

4.2. Bulgarian *Intentionals*

In this section, we examine *Intentionals*, arguing that they exist in Bulgarian but are very restricted elsewhere in the family.

We define *Intentionals* as imperfectives that report on, or ask a question about, events that are in a purely planning stage at the (past) topic situation, without commitment to their materialization in the actual world,³² and we distinguish them from the *Conatives* already illustrated in (51)–(52). *Conatives* report on the materialization of some stage of a VP-event in the evaluation/actual world that remains incomplete, so we propose that they fit the Imperfective Paradox for accomplishment verbs made famous by Dowty (1979) for English Progressives. In other words, (51)–(52) tell us that at some contextually given past time, the dog was actually crossing the road, without commitment to completion; if the VP-event had developed normally without interruptions, the dog would have successfully crossed the road (i.e. traditional *Inertia*).³³ One important difference for our purposes is that while *Conatives* are found throughout Slavic and Romance, *Intentionals* are found in Bulgarian, but seldom in other Slavic languages.

In our view, Bulgarian displays *Intentionals* in three syntactic environments: (a) in the Indicative Mood with ordinary nominative subjects, (b) in the Renarrated Mood discussed in more detail in section 5, and (c) in Involuntary States, with dative subjects as a defining characteristic.

We begin by illustrating *Intentionals* in the first environment in (58)–(62).³⁴ A counterfactual-like flavor that the plan is likely to not be implemented may also be present, sometimes signalled by explicit linguistic material.

- (58) Context: It is a pity the cinema had to close because of fire hazards. Bg
 Da, naistina. Utre {**davaxa** / **prožektiraxa**} Avatar.
 Yes, indeed. Tomorrow {gave.Impf.IMP / project.Impf.IMP} Avatar
 'Yes, indeed. Tomorrow they were showing Avatar.'

³¹ French scholars (Labeau and Larrivé, 2005 and references therein) list two additional modal readings for imperfects: the *Forain* one in (i.a) also found in at least Spanish and perhaps in Bulgarian, and the *Hypocoristique* in (i.b), both with present reference.

- (i) a. Alors, qu'est-ce qu'elle **voulait** la petite dame? Fr
 So, what's-it that she wanted.IMP the little lady.
 'So, what does the little lady want?'
 b. Oh, mais c'est qu'on **avait** mal à la papatte.
 Oh, but it's that one had.IMP hurt on the leg
 'Oh, but how much our little leg hurts!'

³² Our *Intentional* label stands for Bazzanella's *planning* and *epistemic-doxastic* labels illustrated in (53)–(54).

³³ On this view, imperfect *trǎgvaše* in (i), which Lindstedt (1985: 130) places amongst *conatives*, counts as an *intentional*, while the two imperfects in Maslov's example (see footnote 29) count as *Conatives*. Depending on the analysis, the intentional character of *zaminavat* could reside in its present or its imperfective character, which makes presents less symptomatic than imperfects, as we noted earlier.

- (i) Edin ot tǎx sǎobštavaše na eksperta, če dva voenni kamiona zaminavat Bg
 One of them informed.Impf.IMP to expert.Def that military trucks depart.Pres
 sled polovin čas. Drug ešelon ot motorni koli **trǎgvaše** v šest časa sutrinta.
 after half hour. Another echelon of motor vehicles leave.Impf.IMP at 6 hours am.
 'One of them informed the expert that two military trucks were leaving in half an hour.
 Another motorized convoy of motor vehicles **was leaving** at 6 am.'

³⁴ We assume that interrogatives express propositions corresponding to suitable answers: *Ivan was playing Romeo in the play tomorrow* for (59), etc.

- (59) *Context:* You look rather lost. Do you need some information?
 Kakva rolja **igraeše** Ivan v piesata utre?
 What role play.Impf.IMP Ivan in play.Def tomorrow
 ‘What role was Ivan playing in the play tomorrow?’
- (60) *Context:* Can Ivan come to dinner tomorrow?
 Ami utre Ivan (maj) **otivaše** na gosti na majka si.
 Well tomorrow Ivan (maybe) went.Impf.IMP on a visit at mother his.CL
 ‘Well tomorrow (maybe) Ivan was going on a visit to his mother.’
- (61) *Context:* Tell me again.
 Koga **pristigaše** avtobusāt utre?
 When arrived.Impf.IMP bus.Def tomorrow?
 ‘When was the bus arriving tomorrow?’
- (62) *Context:* The exam is cancelled! What a relief!
 Inače v slučaj na proval/če se provaljax na izpita, (utre) me
 Otherwise in case of failure/that Refl failed.Impf.IMP at exam.Def, (tomorrow) me.CL
izxvārljaja ot universiteta.
 threw.out.Impf.IMP of university.Def.
 ‘Otherwise, in case of failing the exam, (tomorrow) they were throwing me out of the university.’

The examples in (58)–(62) illustrate that Intentionals may appear in Bulgarian Indicative sentences with both telic and atelic VPs, with activity, achievement, and accomplishment verbs, and in patterns with or without agentivity: i.e. (covert) 3rd person plural subjects sometimes called impersonal, overt/covert volitional subjects with agentive verbs, and non-volitional subjects with non-agentive verbs. They are all prospective, which to our eyes is the unifying point.

Several Bulgarian informants viewed the constructions in (58)–(62) as well-formed options with the relevant meaning in the given contexts. Nevertheless, they often offered other alternatives as more natural or less colloquial. Those include futures-in-the past with *da*-clauses such as (63) and (64)a corresponding to (60) and (61) (and so on for other examples), and imperfective presents as in (64)b. In our view, there are subtle differences in the readings of these alternatives, but we do not discuss them any further.

- (63) Ami, utre Ivan **šteše da xodi** na gosti na majka si. Bg
 Well, tomorrow Ivan would.IMP to go on visit at mother his
 ‘Well, tomorrow Ivan would / was going to go on a visit to his mother.’
- (64) a. Koga **šteše da pristigne** avtobusāt utre?
 When would.IMP to arrive bus.Def tomorrow?
 b. Koga **pristiga** avtobusāt utre?
 When arrive.Pres bus.Def tomorrow?
 ‘When would/does the bus arrive tomorrow?’

Intentionals may be equipped with or facilitated by adjunct phrases as in (65)–(66). As already stated, we view them as overt constituents of a restrictor in the (standard) tripartite quantificational structure of IMPF.

- (65) Sāglasno rešenieto vzeto včera, stačkata **započvaše** dnes. Bg
 According.to decision.Def taken yesterday strike.Def begin.Impf.IMP today
 ‘According to the decision taken yesterday, the strike was supposed to break out today.’
- (66) Na utrešnia kontsert po programa **svirexa** mesata v si minor na Bax,
 On tomorrow’s concert by program played.Impf.IMP Mass in B minor by Bach
 no dirigentāt napusna i sega nikoj ne znae kakvo šte stane.
 but conductor quit and now nobody Neg knows what will happen.
 ‘According to the program, at tomorrow’s concert they were playing Bach’s Mass in B minor, but the conductor quit and now nobody knows what will happen.’

(Rivero, 2009)

A second syntactic environment for Intentionals is the Renarrated Mood in (67)b, compared with the Indicative in (67)a.

- (67) a. Sledvaštata sedmica **pātuva^xme** do Pariž, Bg
 Next.Def week travelled.Impf.IMP to Paris,
 no imaše stački i otenixme pātuvaneto.
 but there.were strikes and cancelled.Perf.AOR trip.Def
 'We **were travelling** to Paris next week, but there were strikes, and we cancelled the trip.'
 (Indicative Imperfective)
 b. Sledvaštata sedmica **pātuvali** do Pariž, (RM Imperfective)
 Next.Def week travelled.Impf.Ppl.RM to Paris
 no imalo stački i otenili pātuvaneto.
 but there.were strikes and cancelled.Perf.Ppl.RM trip.Def
 'Apparently, next week they **were travelling** to Paris, but there were strikes, and they cancelled the trip.'

We argue in section 5 that IMPF displays the same semantic properties in the Renarrated Mood and in Indicatives, but in the Renarrated Mood it resides in a different morphology: the (secondary) imperfective participle *pātuvali*.

The third syntactic context for Intentionals is Involuntary States in (68)a–c.

- (68) a. Na detsata im se **raboteše**. Bg
 To children.Def CL.Dat Refl work.Impf.IMP.3Sg
 'The children {were in a working mood/ felt like working}.'
 b. Na Ivan mu se **četj^xaxa** knigi.
 To Ivan CL.Dat Refl read.Impf.IMP.3PI books
 'John {was in the mood/desired} to read books.'
 c. Na Ivan mu se **pročitaše** knjigata.
 To Ivan CL.Dat Refl PR.read.Impf.IMP.3Sg book.Def
 'Ivan felt like reading the book in full.' (but did not have the time)

To briefly explain, the syntax of Involuntary States consists of (a) logical subjects in prepositional phrases for datives doubled by dative clitics (*na Ivan; mu*), (b) reflexive clitics (*se*), (c) verbs with default agreement when intransitive, (3Sg *raboteše*) as in (68)a, or in agreement with nominative logical objects when transitive, (3PI *četj^xaxa*) as in (68)b. In semantics, they have a desiderative reading roughly paraphrased by *be in the mood*. Rivero (2009) and Rivero and Arregui (2012) argue in detail that this meaning crucially relies on an intentional IMPF. That is, in Involuntary States, verbs may be morphologically imperfective as in (68)b, or perfective as in (68)c, but must contain IMPF, which in these Indicative sentences resides in the Imperfect Tense. In sum, Involuntary States report on urges/feelings of the dative, so on possible worlds, and an intentional IMPF is a crucial ingredient in their meaning.

With the three syntactic environments for Bulgarian Intentionals in mind, we turn to a brief comparison with other Slavic languages. The comparison is limited to constructions with nominative subjects, and involuntary states (with dative subjects), given that the Renarrated Mood is specific to Bulgarian (and Macedonian, which we do not consider).

As to constructions with nominative subjects, recall that the context in (58) (*It's a pity the cinema had to close because of fire hazards*) may be paired in Bulgarian with a well-formed and felicitous answer with an Imperfect verb. Elsewhere in Slavic, we find a different situation. That is, answers with past imperfective verbs are ungrammatical, as in (69)a–(71)a, and those with an overt modal constituent are grammatical, as in (69)b–(71)b. As before, Ukrainian stands for East Slavic (Russian is parallel), Polish stands for West Slavic (Czech and Slovak are parallel), and Slovenian represents South Slavic. Precise modal constituents differ as they may consist of modal verbs, as in Ukrainian and Polish, or a modal particle combined with a conditional auxiliary, as in Slovenian.

- (69) a. *Tak. Zavtra vony **pokazuvaly** Avatar. Ukr
 *Yes. Tomorrow they showed.Impf Avatar
 b. Tak. Zavtra vony **maly pokazuvaly** Avatar.
 Yes. Tomorrow they have.Past show.Inf.Impf Avatar.
 'Yes. Tomorrow they had to show Avatar.'
 (70) a. *A jutro **grali** Avatara! Pol
 *And tomorrow they played.Impf Avatar
 b. A **mieli grać** Avatara jutro!
 And have.Past3Pl. play.Inf Avatar tomorrow
 'Yes. Tomorrow they had to show Avatar.'
 (71) a. *Jutri **je igr^xal** Avatar. Slo
 Tomorrow Past.Aux.3Pl play.Impf Avatar
 b. Jutri **naj bi igr^xal** Avatar.
 Tomorrow Mod.Part Cond.Aux play.Impf Avatar
 'Tomorrow they would be showing Avatar.'

Thus, in Bulgarian (past) imperfectives (i.e. Imperfect tense verbs) in constructions with nominative subjects may associate with intentional readings, while past imperfective verbs in the other languages cannot.

Interrogatives provide similar results. In a context such as (59) *You look rather lost. Do you need some information?* replies with Imperfect verbs are grammatical in Bulgarian, as we saw above. However, past imperfective verbs are excluded in other languages: (72)a–(74)a. The relevant intentional reading becomes possible in such languages when verbs of planning, or overt modal expressions are added, as in (72)b–(72)b. As we mentioned above, this is also a possible alternative in Bulgarian as well.

- | | | |
|------|---|-----|
| (72) | a. *Ya zabuv. Sho pokazuvaly zavtra v kinoteatri?
I forgot. What showed.3Pl.Impf tomorrow in cinema?
b. Ya zabuv. Sho planuvaly pokazuvaty zavtra v kinoteatri?
I forgot. What planned.Impf show.Inf tomorrow in cinema?
'I forgot. What did they plan to show at the cinema tomorrow?' | Ukr |
| (73) | a. *Zabudol som! Čo hrali zajtra v kine?
Forgot Aux! What played.Impf tomorrow in cinema?
b. Zabudol som! Čo majú hrať zajtra v kine?
Forgot Aux! What have.Pres.3Pl play.Inf tomorrow in cinema?
'I forgot. What would they show at the cinema tomorrow?' | Svk |
| (74) | a. *Kaj je jutri igralo v kinu?
b. Kaj naj bi jutri igralo v kinu?
what Mod.Part Cond.Aux tomorrow played.Impf in cinema
'What is supposed to be playing at the cinema tomorrow?' | Slo |

In Bulgarian, Involuntary States such as (68)a–b have a desiderative reading, which we have attributed to their intentional IMPF. Involuntary State constructions exist in all Slavic languages, but with rather different semantics. In Slovenian, which is another South Slavic representative, Involuntary States have desiderative semantics as in Bulgarian. The example in (75) reports on an urge to dance by John, without telling us that John actually danced.

- | | | |
|------|--|-----|
| (75) | Janezu se je plesalo.
J.Dat Refl Aux.3Sg danced.Impf
'John felt like dancing.' | Slo |
|------|--|-----|
- (Rivero and Sheppard, 2008)

By contrast, Involuntary States have 'actual' readings in Polish (76), which reports that John did actually dance.

- | | | |
|------|---|-----|
| (76) | Jankowi tańczyło się dobrze.
John.Dat danced.Impf Refl well
'(Somehow), John danced with pleasure.' | Pol |
|------|---|-----|

The syntax and semantics of Involuntary States are discussed in considerable detail in (Rivero and Arregui, 2012) to which we refer the interested reader. In brief, the claim in that paper is that in South Slavic, Involuntary States are a specialized syntactic context where the IMPF operator may be coupled to an intentional meaning, and that in East and West Slavic, by contrast, Involuntary States are 'actual' because in the languages of those groups there is no IMPF with intentional properties, so imperfectives must be interpreted as habitual or ongoing, as in section 2.³⁵

To summarize, Bulgarian resembles Romance in exhibiting in general Intentional imperfectives. It displays Intentionals in three syntactic environments: (a) Indicatives with nominative subjects, (b) the Renarrated Mood, and (c) Involuntary States. In other South Slavic languages, Intentionals seem restricted to Involuntary States, i.e. constructions with dative subjects and a desiderative meaning. In East and West Slavic, Intentionals seem altogether absent, and if they exist, they are extremely restricted.³⁶

³⁵ An anonymous reviewer objects to the idea that Russian is one of the languages whose Involuntary States lack desiderative readings. Here we adopt the position of Rivero and Arregui (2012), who after considering (past) Involuntary States in Russian that lack modal modifiers and are affirmative, go on to conclude that this language lacks (bare) Involuntary states with a desiderative reading. A reviewer of Arregui et al. (2014: footnote 19) also expresses doubts that Russian lacks intentional imperfective readings. Thus it seems that the status of Russian requires further research, but the topic is beyond the scope of this paper.

³⁶ Motion verbs could be an exception with special properties. Inspired by Kagan (2007), Arregui et al. (2014a) suggest that the lexical structure of motion verbs in Slavic languages that participate in the determinate-indeterminate distinction, which do not include Bulgarian, could contain IMPF with intentional properties. On this view, intentional readings would be possible with many types of Vendlerian verbs in Bulgarian (Vendler, 1967), as we showed above, but they would be restricted to motion verbs in other Slavic languages.

4.3. Analyses for Conatives and for Intentionals

In the literature, we find proposals that derive Intentionals from Ongoing Imperfectives.³⁷ We also find views that blend Conatives and Intentionals as when the label Conative is applied to the description of situations when **no** materialized stage of the event is located in the evaluation world (see also footnote 33). Intentionals are subject to variation, so it seems important to distinguish them from both Ongoing Imperfectives and Conative Imperfectives,³⁸ which as we saw in (51)–(52) are general in both Slavic and Romance.

In this section, we borrow an analysis of Intentionals from Arregui et al. (2014) which distinguishes Conatives from Ongoing imperfectives in section 2.2, and in so doing also proposes formal distinctions between Conatives and Intentional imperfectives. Drawing inspiration from Dowty (1979), Cipria and Roberts (2000), and Rivero and Arregui (2010, 2012), Arregui et al. (2014) define what they dub 'events-in-progress' corresponding to our Conatives in (51)–(52) as incomplete events in development at the past topic situation, and analyze them in terms of a MB that appeals to *Event Inertia*, as in (77).

(77) *Event Inertia*

$MB_{E-inertia} = \lambda s. \lambda s'. s' \text{ is an } \textbf{Event-inertia} \text{ situation for } s,$

Where for any two situations s and s' , s' is an *Event-inertia* situation for s iff all the events that have actually started in s *continue* in s' as they would if there were no interruptions.

The intuition behind (77) is that there is something actually happening that, in normal circumstances, will lead to the truth of the embedded clause. An inertia situation s' will cash out the normal consequences of what is already going on in s , must be a normal continuation of s , with a temporal dimension that goes beyond that of s into the future, and must obey the natural laws of s and its expected pattern of development.

On this view, differences between Conatives and Intentionals are encoded directly in semantics by making a distinction between *Event Inertia* in (77) for events already in progress in the actual world (i.e. the Imperfective Paradox), and *Preparatory Inertia* in (78) for events only in preparation.

(78) *Preparatory Inertia*

$MB_{P-inertia} = \lambda s. \lambda s'. s' \text{ is a } \textbf{Preparatory-inertia} \text{ situation for } s,$

Where for any two situations s and s' , s' is a *Preparatory-inertia* situation for s iff all the events that are in preparatory stages in s *continue* in s' as they would if there were no interruptions.

The MBs in (77)–(78) are both 'modal' as they allow IMPF to access situations in worlds that are not the evaluation world. Thus, sentences will be true even though the culmination of the event is found in other possible worlds.³⁹ In the MB in (77), an event in s can be said to *continue* in s' only if s' has as part an event with beginning stages that have counterparts in s . Similarly, in MB (78), preparations for an event in s *continue* in s' only if s' has as part an event with preparations that have counterparts in s , which may be part of the evaluation world, but also of other possible worlds.

On this view Conatives as in (51)–(52) have the LF in (79)a and their truth-conditions are in (79)b. (79)a will be true iff all event-inertia situations for topic s_i are situations in which the dog reaches the other side of the road. That is, Event-inertia situations will be normal continuations in which the events of crossing the road that have actually started reach their expected conclusion.

- (79) a. [past_i [IMPF [the dog cross the road]]]
b. [[[79)a]]^c.⁹ = 1 iff

³⁷ For instance, Cipria and Roberts (2000) see Intentionals as a pragmatic extension of ongoing imperfective readings in Spanish. If we adopted a Jacobsonian terminology, Cipria and Roberts consider that intentional imperfects are 'transposed' and their reading is derived by pragmatic coercion. An anonymous reviewer finds some intentional uses of Bulgarian imperfects reported here marginal or deviant, and suggests to classify them as 'transposed' in the Jacobsonian sense. Bulgarian intentionals often require a rich (linguistic) contextualization, but are felicitous for a variety of speakers we have consulted.

³⁸ Lexical variation is often mentioned in the context of conatives. For instance, it is remarked that the same Classical Greek verb means 'find' in perfective form and 'search' in imperfective (conative) form, or that Spanish aorist *supe* means 'I found out' and Imperfect *sabía* means 'I knew'. Such differences, however, turn out to be language-specific and belong in lexical structure (i.e. Situation Aspect). By contrast, Imperfective Paradox phenomena here attributed to IMPF may rely on accomplishment verbs, but generalize across Slavic and Romance.

³⁹ Under standard assumptions, situations are part of at most one world. However, following Arregui (2010), Arregui et al. (2014: section 2) allow for the identification of situations across worlds using *counterpart relations*, which make it possible to talk about continuations in possible worlds for events in the actual world. In the MBs in (77)–(78), inertia situations are viewed as modal extensions/continuations in possible worlds for a topic situation.

$\forall s': MB_{E-inertia}(s_i)(s') = 1, \exists e: e$ is an event of the dog crossing the road in s' .
 Where $[[past_i]]^{c, g} = g(i) = s_i$ (the salient s the sentence was about),
 and an event of the dog crossing the road is a complete event (i.e. the dog reaches the other side).

Given the above analysis, Conatives as in (51)–(52) are formally distinguished from the Ongoing imperfectives in section 2.2. That is, both types share IMPF, but each associates with a different MB. Ongoing imperfectives involve a relation that gives IMPF access to all subparts of the topic situation ($MB_{Ongoing} = \lambda s. \lambda s'. s' < s$), and Conatives involve the $MB_{E-inertia}$ in (77).

The distinction between Ongoing imperfectives and Conative imperfectives is required to make correct semantic predictions, as we now show. On the one hand, when speaking of telic events, $MB_{E-inertia}$ in (77) correctly captures modal intuitions regarding incomplete events associated with (51)–(52), which fits the classical Imperfective Paradox of Dowty. These intuitions, however, could not be captured by $MB_{Ongoing}$ in section 2.2, which predicts that the topic situation contains (complete) event(s) of the dog crossing the road. Thus, $MB_{E-inertia}$ in this section and $MB_{Ongoing}$ in section 2.2 make different predictions for telic events.

On the other hand, the two MBs also make different predictions for atelic events such as (80).

- (80) Kučeto minavaše po pătja (kogato avtobusăt go blăsna). Bg
 Dog.Def walked.Impf.IMP on road.Def (when bus.Def it.CL hit)
 'The dog was walking on the road (when it was run over by a bus)'.

If in (80), IMPF is interpreted in relation to the $MB_{E-inertia}$ in (77) for Conatives, the sentence will be true only if the dog continues to stroll in the normal continuations of the topic situation (i.e. with a modal dimension in the truth-conditions).⁴⁰ If IMPF is interpreted in relation to $MB_{Ongoing}$ in section 2.2, the sentence will be true only if the sub-situations of the topic situation include an event of the dog walking on the road (i.e. without a modal dimension; there was simply walking going on when the dog was run over). The proposed analysis predicts that both claims can in fact be made. Suppose that the dog was trained to walk on the street until exactly 6 pm, and then to freeze on the spot. If at 5:59 pm it is run over by a bus, someone could ask: 'What was the dog doing when it was run over by the bus?'. The answer could be *Minavaše po pătja* '(It was) walking on the road.' There is no presumption that the dog would have kept walking if the bus had hit it. It is natural to think that if the bus had not hit the dog, the dog would have kept on walking, but it is not necessary for truth. In sum $MB_{Ongoing}$ for Ongoing imperfectives in section 2.2 and $MB_{E-inertia}$ for Conatives are both required to make correct predictions in the case of telic events, and in the case of atelic events.

Let us continue with the analysis of Intentionals under Preparatory-inertia. Consider (67)a partially repeated as (81), with the LF in (82)a and truth-conditions in (82)b:

- (81) Sledvaštata sedmica **pătuvaxme** do Pariž, (no imaše stački, i otmenixme pătuvaneto)
 'We **were travelling** to Paris next week, (but there were strikes, and we cancelled the trip).'
- (82) a. $[past_i [IMPF [we \text{ travel to Paris next week}]]]$
 b. $[[82a]]^{g, c} = 1$ iff
 $\forall s': MB_{P-inertia}(s_i)(s') = 1, \exists e: e$ is an event of our travelling to Paris next week in s' .
 Where $[[past_i]]^{c, g} = g(i) = s_i$ (the salient situation in which plans have been made regarding the trip).

In P-inertia situations, imperfectives talk about the content of plans or of what has been arranged, and plans/preparations unfold normally. According to (82)b, (82)a will be true iff all P-inertia situations for s_i are such that we travel to Paris (if past plans unfold normally, we travel to Paris next week).

To conclude with section 4, in this section we identified a second instance of cross-linguistic variation affecting IMPF in Slavic, as most languages of the family lack Intentional imperfectives. We proposed that this variation supports fine formal distinctions between {events-in-progress/unsuccessful attempts} encoded in imperfectives for which we adopted the (traditional) label 'Conative', and events purely in preparation encoded in imperfectives we labelled 'Intentional'. We

⁴⁰ An anonymous reviewer inquires about the 'default' interpretation of IMPF in this case. In the approach adopted in this paper, restrictors for IMPF are either linguistically defined as in the above example, or provided by context. One consequence of this view is that there is no 'default' interpretation for IMPF although readings may be classified in terms of frequency. Depending on the type of verb in a construction that lacks an overt restrictor and is not properly contextualized (i.e. out-of-the blue), a Bulgarian imperfect construction counterpart of *My mother sang* is likely to be interpreted in a sense that assigns a characteristic property to the mother (i.e. a habitual/generic in this paper).

proposed two different MBs to distinguish between these two readings, arguing that IMPF in most Slavic languages does not have access, or has only some limited access to, the one that involves Preparatory Inertia (i.e. Intentionals).⁴¹ We also argued that while Conative imperfectives and Ongoing imperfectives do not display variation in Slavic or Romance, they must nevertheless be distinguished formally in terms of two different MBs needed to make correct semantic predictions.

5. IMPF and the Renarrated Mood in Bulgarian

In this section, we conclude our exploration of variation by examining the role of IMPF in the evidential verbal paradigm we call Renarrated Mood (RM), also dubbed *preizkazno naklonenie* ‘discourse mood’ (Andrejčin, 1977), *énonciation médiatisée* ‘mediated enunciation’ (Guentcheva, 1996), Perfect of Evidentiality (Izvorski, 1997), *vid na izkazvaneto* ‘discourse aspect’ (Kucharov, 1998: 413), and Indirect (Koev, 2011), among other terms.

Typically, the RM illustrated and glossed with *apparently* in (83)a–(85)a is used in reports or narratives where the speaker has not witnessed directly the events that are being described (Maslov, 1959; Pashov, 1989, 2005; Nitsolova, 2008; among others). According to some authors, the RM can also express a range of inferential meanings (Izvorski, 1997; Nitsolova, 2008; Smirnova, 2013; among others). Pashov (2005), however, argues that the RM of type (83)a is limited to reportative readings, while the Present Perfect of the Indicative Mood counterpart in (83)b is for inferential readings.

- | | | | |
|------|----|--|----|
| (83) | a. | Ivan izjal tsjalata banitsa.
Ivan eat.Perf.Ppl.RM whole.Def cheese-pie
‘Ivan apparently ate the whole cheese-pie.’ | Bg |
| | b. | Ivan e izjal tsjalata banitsa.
Ivan Aux eat.Perf.Ppl.PRF whole.Def cheese-pie
‘Ivan has eaten the whole cheese-pie.’ | |
| (84) | a. | Ivan svirel na piano.
Ivan played.Impf.Ppl.RM on piano
‘Apparently, Ivan plays/played the piano.’ | |
| | b. | Ivan e svirel na piano
Ivan Aux played.Impf.Ppl.PRF on the piano
‘Ivan has played the piano.’ | |
| (85) | a. | Ivan bil čel Anna Karenina.
Ivan Aux.RM read.Impf.Ppl.RM Anna Karenina
‘Ivan has/had apparently read Anna Karenina.’ | |
| | b. | Ivan e čel Anna Karenina
Ivan Aux read.Impf.Ppl.PRF Anna Karenina.
‘Ivan has read Anna Karenina.’ | |

The RM displays a paradigm of tenses systematically characterized by past L-participles – *izja-l* ‘eat-en’, *svire-l-a* ‘played’, *bi-l* ‘be-en’, respectively – with some tenses overlapping in form with the indicative present perfect. However, in standard variants RM forms differ from perfects in so far as they lack the auxiliary in the 3rd person, as illustrated by the

⁴¹ An anonymous reviewer remarks that modal readings seem to be found in languages that encode IMPF in a high position in the (syntactic) structure (i.e. the imperfect inflection), and absent in languages with a structurally lower IMPF (i.e. imperfectivity on the verb stem). This reviewer thus suggests that we should consider an approach where imperfective readings result from syntactic or hierarchical positions as in (Condoravdi, 2002) (i.e. an English *have* that raises or scopes over an epistemic modal has a different semantic effect than the one that is under the scope of the epistemic modal or remains in situ; see also Hacquard, 2006 for related ideas). On the one hand, modal readings are not exclusively found in languages with imperfect tenses. We saw that imperfective readings with ‘imperfective paradox’ characteristics (our conatives), which usually receive a modal analysis, are general in both Slavic and Romance. Habituals also involve a modal dimension, and require an analysis where IMPF scopes over both a restrictor clause and a nuclear scope clause, and they are also general in Slavic and Romance. On the other hand, if the readings that the Romance tradition dubs ‘modal’ were a consequence of an IMPF that is high in the syntactic structure, we would expect Bulgarian to display similar ‘modal’ readings to those of Italian, but Bulgarian is more restricted than Italian. Finally, we did not develop an analysis for ‘oniric’ imperfective readings, one of the Romance traditional ‘modal’ types, but we noted that they are also general in Slavic. Thus, we think that the IMPF proposal coupled to different MBs is better able to capture differences in imperfective readings than a structural approach that depends on high vs. low syntactic or LF positions for IMPF.

contrast between RM (83)a–(85)a and indicative perfects in (83)b–(85)b, which is where Pashov (2005) establishes a difference between reportatives and inferentials.

The RM has been a topic of considerable attention in the Bulgarian grammatical tradition (Andrejčin, 1944; Maslov, 1959; Pashov, 1989, 2005; among many others), was brought to the attention of the general linguistic public interested in evidentiality by Jakobson (1957/1971), and has attracted recent interest in formal semantics (Izvorski, 1997; Sauerland and Schenner, 2007; Koev, 2011; Smirnova, 2013).

The RM also proves particularly interesting for our program on IMPF variation for several reasons. First, it provides additional support for our views on semantic imperfectivity (i.e. IMPF), in so far as its imperfective verbs share readings with Imperfect verbs of the indicative mood in sections 2 and 4 (i.e. habitual, ongoing, conative, and intentional). Such a parallelism suggests that morphologically imperfective RM forms contain an IMPF operator with the same core meaning as Indicative verbs, and access the same MBs. Second, the RM proves challenging from a comparative view within Slavic for at least one morphological and one semantic reason. On the one hand, RM verbs encode IMPF in the imperfective morphology of the verb, so differ from Bulgarian indicative verbs, where IMPF is encoded in the imperfect/present inflections, and resemble participial forms for the past elsewhere in Slavic. On the other hand, the RM also contributes to semantic variation within Slavic, in so far as morphologically imperfective RM verbs systematically lack the completion reading of the so-called Russian and Polish Factual past imperfectives discussed in detail in section 3. Third, RM verbs also prove interesting for comparisons with Romance, famous for Narrative (indicative) imperfects specialized for reports. When imperfective RM verbs in a reportative role are compared to Romance Narrative Imperfects, considerable differences emerge between the two. In addition, Bulgarian Indicative Imperfects also differ from Romance Narrative Imperfects. Overall, a comparison of indicative Imperfects and imperfective RM verbs with a reportative function in Bulgarian with Narrative Imperfects in Romance, then, results in a complex set of similarities and differences that prove significant for our proposals on IMPF.

A main claim in this section is that the RM and the indicative mood share Viewpoint systems in Bulgarian. As a result, the RM serves to support the assumption that in Bulgarian IMPF never associates with ‘completion’ readings that can be observed in Factuals of the types discussed in section 3 for Polish and Russian and also in the Narrative Imperfects of Romance we discuss later. In section 5.1, we briefly examine the RM, stressing connections between its morphology and its viewpoint semantics, develop a proposal for comparisons with Slavic and Romance, but do not attempt to provide an overall analysis of this mood, a topic beyond the scope of this paper. In section 5.2, we introduce so-called Narrative Imperfects in Romance, which seem to be at the crossroads between Bulgarian and Russian/Polish. That is, Romance Narratives have a reportative function, which relates them to the RM in Bulgarian, and display completion readings, which relates them to the Polish and Russian Factual imperfectives, characterized by completion readings discussed in section 3. After we establish differences between Romance Narratives and the Bulgarian RM, we conclude in section 5.3 by briefly sketching proposals to capture core differences behind the noted variation in these two types of reportatives.

5.1. Aspect and tense in the RM: a Viewpoint proposal

As stated above, the Bulgarian RM illustrated in (83)a–(85)a has a dedicated or autonomous morphology consistently characterized by past L-participles. It developed after the 16th century, and distinguishes Bulgarian from most Slavic languages, except Macedonian. Bulgarian grammars (Maslov, 1959; among many others) point out that the RM is typical of historical narratives and fairy tales and is widely used in reports or narrations where the speaker has not witnessed directly the described events. Recent discussions also stress that the RM can express a range of inferential meanings (Izvorski, 1997, among others), and Smirnova (2013) argues that it may also be based on (direct) sensory information under restricted conditions. By contrast, the Indicative Mood discussed in sections 2–4 mainly in the context of the Imperfect tense (but with complete parallelism in Present Tenses) is considered to be based on direct evidence, and encodes generally accepted truths, as in the habitual/generic readings in section 2.1.

Izvorski (1997) and Smirnova (2013) propose modal analyses for the RM that differ in important respects, but share an evidentiality operator **EV** as a universal epistemic modal. Arregui et al. (2014) also adopt an EV operator for RM forms, and argue that those with imperfective morphology contain an additional IMPF operator under the scope of this evidential [EV ... [IMPF]], with the same semantic properties of the IMPF of the Indicative Mood discussed in detail in sections 2–4 in this paper. In this section we adopt the sketched proposal, and go on to add details to the morphological encoding of IMPF and its formal consequences for the overall temporal, aspectual, modal, and evidential (TAME) system of the RM, arguing that Viewpoint in this mood plays a fundamental role in distinctions that at times appear strictly temporal.

It is well known that the RM can allude to past, present, and future, as partially illustrated in (84)a–(86)a, and that it participates in a paradigm of tenses usually viewed in opposition to the Indicative Mood (Scatton, 1983; Pashov, 1989,

Table 4
Comparison of tenses in the Indicative and Renarrated Moods in Bulgarian.

Indicative Mood		Renarrated Mood	
Present	<i>piše</i>	?	<i>piše-l</i>
Imperfect	<i>pišeše</i>	?	<i>pisa-l</i>
Aorist	<i>pisa</i>	?	
Future	<i>šte piše</i>	>	<i>štja-l da piše</i>
Past Future	<i>šteše da piše</i>		
Present Perfect	<i>e pisa-l</i>	>	<i>bi-l pisa-l</i>
Past Perfect	<i>beše pisa-l</i>		

2005; among many others). However, the RM exhibits a smaller number of morphologically distinct ‘tenses’ than the Indicative Mood, or is subject to syncretism/neutralization, as indicated in Table 4 for 3rd person singular forms of *write* (in the masculine where applicable). Such neutralization has led to debates on the proper correlation between temporal distinctions in the two moods, resulting in at times conflicting proposals and terminologies we do not review for lack of space. The main conflict arises with respect to morphologically simple or one-word tenses of the Indicative Mood appended with ? in our table, as we explain below.

A view outlined in (Scatton, 1983), for instance, is that the feature [+Past] is neutralized in the RM, which easily accommodates perfects and futures in Table 3. On the one hand, RM *bi-l pisa-l* in Table 3 stands for both the Indicative Present Perfect *e pisa-l* ‘(he/she) has read’, and the Indicative Past Perfect/Pluperfect *beše pisa-l* ‘(he/she) had read’ formally differentiated by Present and Imperfect *be-*auxiliaries. On the other hand, RM *štja-l da piše* is a rough equivalent of both Future Indicative ‘He/she will write’ and Past Future Indicative ‘He/she would write’ formally differentiated by modal items: invariable *šte*, and inflected modal verb *šteše* (in the Imperfect). By contrast, morphologically simple/synthetic tenses in the Indicative Mood do not fit easily under the sketched proposal, as Present *piše* ‘(He/she) writes, is writing’, Aorist *pisa* ‘He/she wrote’, and Imperfect *pišeše* (with readings as discussed in sections 2–4 in this paper) in the Indicative compete with just two forms of the RM: a so-called imperfective past participle *piše-l*, and a so-called perfective past participle *pisa-l*.

In this paper, we adopt a hypothesis that blends traditional and novel dimensions, and argue that the system of morphological ‘tenses’ in the RM depends in great measure on Viewpoint Aspect. In simple terms, we propose that in the RM, morphologically imperfective past participles such as *piše-l* in Table 3 are ambiguous, as the tradition often maintains, and may correspond both to indicative imperfects such as *pišeše*, and to indicative presents such as *piše*. As we shall see, *piše-l* may be disambiguated by linguistic means within a construction, which is important for our purposes, or also in discourse, as the tradition maintains. We know from sections 2–4 that indicative imperfects such as *pišeše* are semantic imperfectives, and we also argued in section 2.1 that indicative presents in Bulgarian are also semantically imperfective, and parallel to imperfects in both interpretation, and syntactic distribution. On our view, what unifies RM *piše-l* with Imperfect *pišeše* and present *piše* is Viewpoint aspect in the shape of an IMPF operator. By contrast, in agreement with the tradition, we propose that RM participles with a perfective morphology such as *pisa-l* in Table 3 are not semantically ambiguous, but have the inherent reading of pasts, and we make them correspond one-to-one to aorists of the indicative mood such as *pisa*. In our proposals then, RM *pisa-l* could be dubbed an *Aoristic Participle* to make the connection clear. In other words, we solve the puzzle indicated in Table 4 as in Table 5. Within the framework of this paper, this hypothesis receives novel support by the syntactic distribution and semantics of prefixed imperfective RM participles when contrasted with prefixed perfective RM participles. We illustrate in footnote 42 that imperfective RM participles result in habitual readings in restrictor clauses, so they are in tandem with the perfective imperfect habituais in section 2.1. By contrast, perfective RM participles result in episodic readings. Thus, we conclude that the correlation between imperfective morphology and IMPF is also one-to-one in the RM, and that the overt morphology is the door to imperfectivity in semantics in Bulgarian.

Another way to express our idea is that the driving force behind apparently temporal oppositions of the RM are largely derivative from Viewpoint Aspect. Imperfective RM past participles such as *piše-l* encode IMPF as in (18), whose flexible semantics allow temporal reference to be past, present, or future. By contrast, perfective RM past participles such as *pisa-l* function as absolute past tenses. That is, they contain a Past temporal operator always subject to Speech Time anchoring. Alternatively, they restrict situations to the past via a perfective operator that is provided with temporal semantics. Under either view, perfectives trigger a systematic reading that is past with respect to Speech Time.

Aspectual semantic oppositions in the Indicative and RM moods are parallel, but are encoded in the RM under a different morphology. To illustrate parallelisms with the Indicative Mood and to demonstrate that imperfective RM forms

Table 5

Proposed correlation of tenses in the Indicative and Renarrated Moods in Bulgarian.

Indicative Mood		Renarrated Mood	
Present	<i>piše</i>	?	<i>piše-l</i>
Imperfect	<i>pišeše</i>	?	
Aorist	<i>pisa</i>	?	<i>pisa-l</i>

share the IMPF characteristics of imperfects and presents discussed in detail in earlier sections of this paper, we revisit some readings of imperfective RM verbs mentioned by Arregui et al. (2014). First consider (86).

- (86) Kogato majka i došla / *dojdela v stajata i, Maria govorela / *govorila s prijatelya si. Bg
 When mother her.CL come.Perf.Ppl.RM/*Impf in room her Mary speak.Impf.Ppl.RM/*Perf
 with boyfriend.def her.CL.
 'Apparently, when her mother came into her room, Mary was talking to her boyfriend.'

Sentence (86) contains an aoristic (Neutral/PERF) RM participle *došla* 'apparently came' in the adjunct *kogato* 'when'-clause. Above, we adopted the position that aoristic RM forms must receive a past meaning with Reference/Topic Time preceding Speech Time (i.e. they function as 'absolute' tenses because they either contain a PAST operator, or a PERF operator that restricts situations to the past). We also mentioned that imperfective RM participles allow temporal reference towards the past, the present, or the future via the flexible semantics of the IMPF they contain. In this particular example, however, the adjunct clause disambiguates main clause *govorela* towards the past, and makes it equivalent to an Indicative Imperfect with a (past) ongoing reading. The opposite morphology is not appropriate for RM forms in (86) because in this context aoristic forms in the main clause, and equivalents of indicative imperfects in the adjunct clause would be unsuitable. In sum, the imperfective RM verb in the main clause in (86) exhibits the reading of ongoing Indicative Imperfects discussed in detail in section 2.2. To repeat, differences with Indicatives are morphological: IMPF is encoded in tense inflections of the imperfect and present tense types in the Indicative, and in imperfective verb stems in the RM.

RM (87) is reminiscent of so-called imperfective-paradox patterns we dubbed conative in section 4, and displays an imperfective participle (*peče/el* 'apparently was winning') with a reading related to the Event-inertia MB discussed in much detail in that section. Again the linguistic context disambiguates this participle as equivalent to an Imperfect (not a Present), locating it in the past.

- (87) Šaxmatistāt peče/el/*pečelil igrata, kogato bil udaren po glavata i igrata bila prekāsna. Bg
 Chess.player.Def won.Impf.Ppl.RM/*Perf game.Def when Aux.RM hit.PV on head.Def and game.
 Def Aux. RM interrupted.PV
 'Apparently, the chess player was winning the game, when he was hit in the head and the game was interrupted.'

Another example is with a generic-like RM *živeeli* 'apparently live/lived' in (88)a, in a context where aoristic *živeli* is not felicitous. Here the RM form resembles Indicative forms – be they past (Imperfects) or present – with the Generic MB in section 2.1.⁴²

⁴² In section 2.1 we argued that Habituals are characterized by large topic situations morphologically encoded in restrictor clauses by means of perfective verb stems in the imperfect indicative. Under the corresponding morphology, the same situation obtains in the RM, as in (i–ii).

- (i) Vseki pāt kogato Maria se **pribirala** vkāšti, Ivan veče bil zaminal. Bg
 Every time when M. Refl PR.arrive.Impf.Ppl.RM home Ivan already had left
 'Every time Mary arrived home, Ivan had already left.' (reported)
 (ii) Kogato Maria se **pribirala** vkasti, Ivan veče bil zaminal. Bg
 When M. Refl PR.arrive.Perf.Ppl.RM home Ivan already had left
 'When Mary arrived home, Ivan had already left.' (reported)

Sentence (i) is a habitual renarrative; its restrictor verb is a prefixed imperfective participle. The prefix encodes a PERF-like operator under the scope of IMPF encoded in the imperfective stem in this case. In (ii), the participle in the restrictor clause displays a prefixed perfective stem; its reading is not habitual, but episodic. This suggests that a properly understood morphology is as clear a diagnostic of imperfectivity in the RM as it is in the indicative mood.

- (88) Dinozavrite *živeli/živeeli v džunglata.
 dinosaurs live.*Perf.Ppl.RM./Impf in jungle.Def
 ‘Apparently, dinosaurs live/lived in the jungle.’

Bg

We argued in section 4.2 that Bulgarian has Intentional imperfectives in the Indicative mood and associated them with a Preparatory-inertia MB that is very restricted or absent in other Slavic languages but is common in Romance. As expected, forms in the RM display parallel properties and an Intentional RM important for our analysis is given in (89). The (secondary) imperfective participle *poseštavali* ‘apparently they were visiting’ is compatible with the information that the trip did not take place, so identifies a past plan in the sense already discussed in detail for Indicative verbs with imperfect tense inflections in section 4.2. If aoristic (Neutral or PERF) *posetili* ‘apparently they visited’ with perfective morphology had instead been used, it would indicate that the visit took place, in conflict with *otmenili* ‘they apparently cancelled’. So here again semantic oppositions relating to viewpoint between Imperfects and Aorists in Indicatives are replicated via a different morphology in the RM: a (secondary) imperfective participle vs. a perfective participle.

- (89) Sledvaštata sedmica poseštavali Pariž, no imalo stački i otmenili pätuvaneto.
 Next.Def week visited.Impf.Ppl.RM Paris but there.were strikes and cancelled.Perf.Ppl.RM. trip.def
 ‘Apparently, next week they were visiting Paris, but there were strikes, and they cancelled the trip.’

Bg

Imperfective RM participles disambiguated by deictic adverbs as either pasts, presents, or prospectives are in (90)–(91).

- (90) (Spored dobre osvedomeni iztočnitsi,) Ivan pišel kniga {a. včera / b. utre}
 According to well-informed sources,) Ivan wrote.Impf.Ppl.RM a book {a. yesterday / b. tomorrow}
 ‘(According to well-informed sources,) Ivan was writing a book {a. yesterday / b. tomorrow}.’
 (91) (Spored dobre osvedomeni iztočnitsi,) Ivan pišel kniga včera i sega ošte ja pišel.
 (According to well-informed sources,) Ivan wrote.Impf.Ppl.RM a book yesterday and now still it.CL wrote.Impf.
 Ppl.RM
 ‘(According to well-informed sources,) Ivan was writing a book yesterday and is apparently still writing it now.’

Bg

In sum, all the readings of IMPF discussed in detail in the context of Indicative Imperfects (or counterparts in the Present tense) in sections 2 and 4 are also found in past L-participles of the RM under an overtly marked imperfective morphology. Arregui et al. (2014) find that examples of the above type support the idea that when IMPF combines with a c-commanding Ev, it accesses all the MBs discussed earlier for Indicatives, and makes its own semantic contribution. In addition, (89)–(90)b support the idea that the MB for intentional readings discussed in section 4 (Preparatory-inertia) can be embedded under an EV operator, so this type of MB is formally encoded in the grammar of Bulgarian.

The RM lacks distinct forms corresponding one-to-one to those encoded by Present, Imperfect and Aorist tense inflections in the Indicative Mood, and encodes IMPF in the (inflectional) morphology of the verb stem, so in this way bears a resemblance to the morphological systems that encode Viewpoint oppositions elsewhere in Slavic. This morphological similarity, however, does not translate into a semantic parallelism, with the variation discussed in section 3, which opposes Polish and Russian to Bulgarian, emerging again in the RM. In other words, imperfective RM participles in Bulgarian also lack the readings we dubbed Factual in Russian and Polish, which are encoded under an imperfective morphology in these languages, as we briefly illustrate next. To this effect, recall the Russian example in (29) in section 3 now repeated as (92), where the event of Lena’s taking the medicine had to be completed.

- (92) Lena (uže) **prinimala** eto lekarstvo.
 Lena (already) took.Impf this medicine
 ‘Lena has (already) taken this medicine.’

Rus

(Kagan, 2007)

We argued in section 3 that so-called completion readings dubbed ‘Factual’ in the literature, as in Russian (92), must be expressed in Bulgarian by Indicative Aorists or Present Perfects (with participles that could be either imperfective or perfective). In a parallel fashion, the completion interpretations labelled ‘Factual’ now under discussion may be encoded in the RM in aoristic/perfective participles, as in (93)a. Imperfective participles as in (93)b may display the readings connected with IMPF in Bulgarian (ongoing, habitual etc.), but lack the relevant completion

reading discussed in the literature on Russian and Polish under the ‘Factual’ label. Thus, RM verbs with imperfective stems resemble Indicative verbs with Imperfect or Present tense morphology, and contrast both with Indicative verbs with Aorist tense inflections, and with RM participles that can be called aoristic in so far as their verb stem is perfective.⁴³

- (93) a. Elena (veče) **vzela** (tova) lekarstvo(to). Bg
 Elena (already) took.Perf.Ppl.RM (this) medicine.Def
 ‘Apparently, Elena already took (this/the) medicine.’
 b. Elena (veče) **vzimala** lekarstvoto.
 Elena (already) took.Impf.Ppl.RM medicine.Def
 (v tozi moment / vseki den / kogato Ivan otvoril vratata)
 (at that moment / every day / when Ivan opened.Perf.Ppl.RM door.Def)
 ‘Apparently, Elena was (already) taking the medicine (at that moment/every day / when Ivan opened the door).’

To conclude, in this section we examined Viewpoint in the RM, proposing that aoristic RM participles, those with perfective stem morphology, are semantically similar to verbs with aorist inflections of the indicative; RM participles with imperfective morphology are aspectually parallel to verbs with imperfect or present inflections in the indicative. Thus, the evidential operator of the RM can scope over IMPF with all the interpretations this operator may receive in Bulgarian.

In section 5.2, we turn to Romance imperfects called Narrative, because they combine two features that prove intriguing for comparisons with Bulgarian. Romance Narratives play a reportative role, which makes them similar to RM forms. However, they also display completion readings reminiscent of Factuals in Russian and Polish. We discuss how those similarities and differences impinge on our views of imperfectivity in Bulgarian, and the variation that affects IMPF crosslinguistically.

5.2. Narrative Imperfects in Romance vs. the Renarrated Mood in Bulgarian

A salient function of the RM is reportative, and the Romance family displays imperfects known as Narrative used in literary and journalistic styles also in a reportative function. A question then arises as to whether this reportative character is suggestive of similarities between Bulgarian and Romance other than those identified in sections 2 and 4 in this paper. In this section, we argue that the similarity is in this case only apparent, and that there are important differences between Romance Narratives and the RM. The most important one is that Narratives display completion readings that make them similar to the Factual imperfectives in Russian and Polish discussed in detail in section 3. By contrast, it is a characteristic

⁴³ We view aoristic RM participles as absolute pasts and imperfective RM participles as IMPF, so we differ from recent proposals where RM tenses are relative with an indirect temporal relation (Evidence Acquisition Time in Smirnova, 2013; Learner’s Time in Koev, 2011). A comparison with such analyses is beyond the scope of this paper, but we refer the interested reader to (Arregui et al., Ms.), and next mention in an oversimplified manner the gist of Smirnova’s proposal, suggesting that the Viewpoint hypothesis can successfully capture in the RM both temporal readings and ‘modal’ readings that do not fit temporal views. For Smirnova, *pisala* in (i) (her (28)) is a past imperfective that “can only be used if the book writing event has terminated prior to the time at which the speaker acquired the relevant evidence”; *pišela* in (ii) (her (29)) is a present imperfective, which “is felicitous only if the book writing event was ongoing at the time when the speaker acquired the relevant evidence.”

- (i) Reportative context: Last month Ivan told you that Maria, your former classmate, spent last year writing a book, and that the book has just been published. Today, your old friend asks you what Maria was doing last year. You say:
 Maria *pisala* / #*pišela* kniga Bg
 Maria write.IMPERF.PAST.PLE / write.IMPERF.PRES.PLE book
 ‘Maria was writing a book, [I heard].’ (PLE=participle in Smirnova’s gloss)
 (ii) Reportative context: Last month at the class reunion Ivan told you that Maria is busy writing a book. Today, your old friend asks you what kept Maria from coming to the class reunion last month. You say:
 Maria *pišela* / #*pisala* kniga Bg
 Maria write.IMPERF.PRES.PLE / write.IMPERF.PAST.PLE book
 ‘Maria was writing a book, [I heard].’

By contrast, we consider *pišela* an imperfective form that may be disambiguated by the linguistic context as past, present, or prospective, as shown in the text. In our view, *pišela* is not felicitous in (i) because the context focuses on the publication of the book; this context is then suitable for a semantic perfective (i.e. aoristic *pisala*), and unsuitable for a semantic imperfective. In (ii) the extra-linguistic context focuses on an ongoing eventuality, which eliminates an aoristic/perfective form as suitable. For Smirnova imperfective *pišel(a)* has an inclusion analysis: Reference Time included in Event Time. In our view, such a proposal faces in the RM the same problems we mentioned for Indicatives in section 4; it cannot, for instance, capture intentional readings in (89) and (90)b.

of IMPF in Bulgarian to never associate with completion readings, which also applies to RM forms, thus distinguishing them from Narrative Imperfects in Romance.

We begin by illustrating Romance Narratives with the Spanish and French examples in (94)a–d, where all verbs in bold are (indicative) imperfects.

- (94) a. Ayer **moría** Borges en Ginebra. Sp
Yesterday died.IMP Borges in Geneva
'Yesterday Borges died in Geneva.' (adapted from Reyes, 1990)
- b. En 1492, Christophe Colomb **découvrait** l'Amérique. Fr
In 1492, Christopher Columbus discovered.IMP the America
'In 1492, Columbus discovered America.' (Labelle, 2003)
- c. A huit heures, les voleurs **entraient** dans la banque, ils
At eight hours, the robbers entered.IMP in the bank, they
discutaient avec un employé, puis se dirigeaient
discussed.IMP with an employee, then Refl directed.IMP
vers le guichet principal.
towards the window main
'At eight, the robbers entered the bank, they discussed (Impf)
with a clerk, then they moved towards the main desk.' (adapted from Jayez, 1999)
- d. La clef tourna dans la serrure. Monsieur Chabot **retirait** son pardessus
The key turned in the lock. Mister Chabot removed.IMP his coat
qu'il **accrochait** à la porte d'entrée, **pénétrait** dans la cuisine et
that he hanged.IMP on the door of entrance, entered into the kitchen and
s'installait dans son fauteuil d'osier.
Refl installed.IMP in his arm.chair of bamboo
'The key turned in the lock. M. Chabot removed his coat that he hanged on the entrance door, went into the
kitchen and sat down on his bamboo armchair.' (Simenon, adapted from Tasmowski-De Ryck, 1985)

A salient and well known characteristic of Romance Narratives is that they have a 'completion' reading, or describe events that are understood as culminated/completed. Spanish (94)a, for example, alludes to Borges' death, not to the process of his dying, and French (94)b speaks of the discovery of America. In this respect, Narratives are reminiscent of the Russian and Polish Factual imperfectives in section 3, a parallelism that has not escaped notice (Grønn, 2008; Arregui et al., 2014). However, as noted by Grønn (2008), Romance Narratives differ from Factuals (in Russian) in at least two ways. One difference is that Romance Narratives are often tied to a definite point in time, as shown in (94)a–b, while the Russian Factuals in section 3 are not. A second difference is that Romance Narratives advance the narrative, as in (94)c–d, while Russian and Polish Factuals do not (another difference is that Russian and Polish Factuals are restricted to telic VPs, while Narratives are not, as in (94)c).

Factuals in section 3 and Narratives, then, demonstrate that imperfectives may report on past complete events in both Slavic and Romance. We argue that a parallel situation is not found in Bulgarian, when speaking of tense inflections in the indicative or imperfective morphology on verb stems in the RM. In support of this claim, we first recall earlier conclusions on factual readings of the type in section 3 for Russian and Polish, the 'Slavic' side of the completion-reading issue. On the one hand, we already know that Bulgarian differs from Russian and Polish in so far as the imperfect/present inflections lack the relevant completion meanings, which can nevertheless be expressed by aorist inflections. On the other hand, we just established in section 5.1 that RM participles also lack completion readings, which can nevertheless be expressed with the RM participles that we call aoristic, which carry perfective morphology. These two Bulgarian moods, then, are parallel in displaying imperfective forms without readings that can be called Factual in the sense applied to Russian and Polish imperfectives in section 3.

Now let us turn to the Narratives in (94), the 'Romance' side of the completion-reading issue. First, Bulgarian indicative imperfects (or presents) lack readings of this type. That is, the examples in (94) have grammatical counterparts in Bulgarian with morphologically imperfective imperfect verbs, but such patterns cannot depict culminated or completed events. To illustrate, a morphological counterpart for (94)c is (95); as the adverbial 'every day' suggests, its (bolded) verbs are compatible with the habitual and iterative readings in section 2.1, but do not associate with the relevant completion reading. In other words Bulgarian imperfects are incompatible with the perfective-like meanings associated with Romance Narrative Imperfects in (94)a–d.

- (95) (Vseki den) v osem časa kradtsite **vlizaxa** v bankata, Bg
 (Every day) at eight hours robbers.Def entered.Impf.IMP in bank.Def,
govorexa s edin ot služitelite, i posle se **otpravjaxa** kăm
 spoke.Impf.IMP with one of employees.Def, and after Refl headed.Impf.IMP to
 glavnoto giše.
 main.Def counter
 “(Every day) at 8 o’clock the robbers would enter the bank, would speak to one of the clerks and then would head
 for the main counter.”

Bulgarian Indicative imperfects, then, make unavailable Narrative readings of the Romance type, and unsurprisingly, those meanings are typically conveyed by tenses such as the aorist in (96), which we earlier associated with a Neutral/PERF Viewpoint.⁴⁴

- (96) V osem časa kradtsite **vljazoxa** v bankata, **govorixa** Bg
 At eight hours robbers entered.Perf.AOR in bank.Def, speak.Perf.AOR
 s edin ot služitelite, i posle se **otpravixa** kăm glavnoto giše.
 with one of employees.Def, and then Refl headed.Perf.AOR to main.Def counter
 “At eight o’clock, the robbers entered the bank, spoke to one of the clerks and then headed for the main counter”

It could be suggested that there are no narrative-like imperfects in the indicative mood in Bulgarian because this language has a dedicated mood to fulfill a reportative function, namely the RM. The RM is also used in narratives, so it may seem tempting to draw a parallel with (94) and seemingly close counterparts in the RM. That is, (97)a could inform us that Borges died, (97)b could tell us about the date America was discovered, and (97)c seems to correspond to (94)c.

- (97) a. Prez 1492 godina Xristofor Kolumb **otkril** Amerika Bg
 In 1492 year, Christopher Columbus discovered.Perf.Ppl.RM America
 ‘(Apparently) in 1492, Columbus discovered America.’
 b. Včera v Ženeva **počinal** Borges.
 Yesterday in Geneva died.Perf.Ppl.RM Borges
 c. V osem časa kradtsite **vlezi** v bankata,
 At eight hours robbers.Def entered.Perf.Ppl.RM in bank.Def,
govorili s edin ot služitelite, i posle se
 spoke.Perf.Ppl.RM with one of employees.Def, and then Refl
otpravili kăm glavnoto giše.
 headed.Perf.Ppl.RM to main.Def counter
 “At eight, the robbers (apparently) entered the bank, spoke to one of the clerks and then headed to the main
 counter.”

However, the parallelism proves illusory, as there are important differences between Romance Narratives and the RM. We mention some in passing, before we turn to Viewpoint contrasts that prove fundamental for our purposes.

A first difference is that the RM may play both a reportative function, as the tradition stresses, and an inferential function (Izvorski, 1997; Smirnova, 2013; but see Pashov, 2005), while Romance Narratives are reportative (with inferential functions assigned to other verb forms). In section 5.3 we suggest that this difference could derive from the hypothesis that Romance Narratives do not contain an EV Operator, and thus lack epistemic dimensions associated with the RM.

A second difference concerns temporal-like relations. In parallel to the Facts of Russian and Polish in section 3, Narratives allude just to past events. By contrast, the RM participates in a rich TAME system that allows it to allude to past and present events as well as events that still have not occurred; this is achieved when (a) imperfective participles display intentional readings in (89) and (90)b, or (b) modal verbs encode futures in (98).

- (98) Zatvorete vsički prozortsi, če dovečera šťjalo da vali! Bg
 Close.IM all windows because tonight would.RM to rain
 “Close all windows because (apparently) tonight it is going to rain!”

For our purposes, however, the fundamental contrast between Romance Narrative Imperfects and the RM relates to Viewpoint. First, completion readings such as those illustrated in Romance (94)a–d are encoded in the Bulgarian RM by

⁴⁴ Aoristic past tenses such as the Spanish Pretérito and the French Passé Simple are also grammatical in Romance contexts such as (94).

perfective/aoristic participles, as illustrated above in (97)a–b. Imperfective verb forms are also possible, but suitable readings for them are ongoing, habitual or iterative, and would thus differ significantly from those in (94). To illustrate, (99) in the RM is parallel to (96) in the Indicative, but presents indirect not direct information, (in addition to an iterative/habitual reading, not a completion reading).

- (99) (Vseki den) v osem časa kradtsite **vlizali** v bankata, Bg
 (Every day) at eight hours robbers.Def entered.Impf.Ppl.RM in bank.Def,
govoreli s edin ot služitelite, i posle se **otpravjali**
 spoke.Impf.Ppl.RM to one of employees.Def and then Refl headed.Impf.Ppl.RM
 kām glavnoto giše.
 to main.Def counter
 “(Every day) at 8 o’clock the robbers were (apparently) entering the bank, speaking to one of the clerks and then heading to the main counter.”

Second, Romance Narratives display the particular property of advancing narrations, which is the usual function of perfectives in other than generic/habitual contexts. As illustrated in (97)c, forms of the RM contrast with Romance Narratives in this respect and are thus unexceptional. In other words, aoristic/perfective participles are used to advance the narrative line in the RM.

To conclude, Narratives in Romance and the Bulgarian RM may seem to have similar uses in some contexts, but should not be viewed as equivalent. The Renarrated and Indicative Moods share a common Viewpoint system in Bulgarian, with an IMPF that never associates with completion readings, which makes this language contrast both with Romance, as shown in this section, and also with some Slavic languages, as the discussion in section 3 combined with the information added in this section demonstrates.

5.3. IMPF and (lack of) completion readings in Bulgarian

We just concluded that Bulgarian contrasts with some Slavic languages and Romance in displaying an IMPF that never associates with completion readings. In this section we briefly note how this difference fits within the formal framework of this paper.

As noted in section 3, for Arregui et al. (2014) Factuals in Russian and Polish are instances where IMPF quantifies over actual situations with consequences in the topic situation. This proposal is encoded in a Resultative MB, where the topic situation contains consequences of the event, and the situations quantified over contain the event. This MB is never available to IMPF in Bulgarian, so in this language imperfective constructions can share familiar meanings such as those of the ongoing type with Russian and Polish constructions, without exhibiting resultative meanings.

Arregui et al. (2014) propose that Romance Narratives resemble Russian and Polish Factuals in section 3 in presenting VP events that have actually happened and are complete. In Narratives, however, the focus is not on the results of the event, but on the event itself, so the culmination of the event is topical, not its consequences. They propose to capture this interpretation with a MB,⁴⁵ where the topic situation includes the culmination of the events in the situations quantified over. Arregui et al. (2014) speculate that since the VP-event culminates within the topic situation, this makes it possible for the narrative time to move forward. As this MB is not available to imperfectives in Bulgarian, here too IMPF can share a variety of readings with Romance, without exhibiting a reading with ‘narrative’ properties in the Indicative or the RM moods. In the Factuals of section 3 and the Romance Narratives of this section alike, then, the domain of quantification of IMPF consists of actual world situations that lead up to or culminate in the topic situation, guaranteeing a factual reading of the VP-predicate, and this is what is generally absent from IMPF in Bulgarian.

Given the above analysis, Romance Narratives contain only one layer of modality, namely IMPF, while the RM in Bulgarian consists of both a higher Epistemic Operator and a lower IMPF (or PF) operator. Differences between the two constructions are closely tracked by morphology. On the one hand, Romance Narratives are marked by a simple morphology in the shape of an imperfect, and do not contain evidential marking. On the other hand, RM forms are marked with doubly faceted morphology: a past participle signals the epistemic operator, and imperfective (or perfective) morphology on the participle signals IMPF (or PF), each playing a different semantic role.

The functions of (semantic) imperfectivity in Romance Narratives and in the Bulgarian RM are not the same, which underlies their considerable differences. Imperfectivity is parallel in RM and Indicative contexts in Bulgarian, but in Romance Narratives, it leads to a complete-event interpretation. In our analysis this contrast arises because in the RM the

⁴⁵ (i) $MB_{\text{narrative}} = \lambda s. \lambda s'. s' \text{ culminates in } s.$
 where for two situations s and s' , s' culminates in s iff all events in s' have their culmination in s .

IMPF operator is interpreted in the scope of the evidential modal (Ev), and has access to the readings discussed in sections 2 and 4 for the Indicative Mood. By contrast, in Romance Narratives IMPF is the only operator, and achieves a particular interpretation via a specialized domain of quantification. The RM, then, serves to illustrate that the shared skeleton we propose for IMPF combined with different accessibility relations available to this operator in Bulgarian can accommodate considerable differences with Romance and within Slavic itself.

In addition, the RM provides additional support for our proposal that IMPF is not devoid of semantic content, as in each of the cases examined in this section, we see readings that are predictable given our earlier proposals for IMPF.

6. Conclusion

In this paper, we have examined Bulgarian from a comparative perspective contrasting this language with some Slavic languages on the one hand and some Romance languages on the other. We argued that the complex Tense-Aspect-Modality-Evidentiality (TAME) system of this language morphologically embodied both in Imperfect/Present tense inflections and Aorist tense inflections on the one hand, and perfective or imperfective marking on verb stems on the other provides a testing ground for the hypothesis that imperfectives share an invariant semantic modal architecture that we placed under a modal operator IMPF, with cross-linguistic differences in interpretation mainly due to restrictions that may be grammaticalized differently across languages.

In Bulgarian, morphology serves as a transparent window for imperfective readings, since the IMPF operator is morphologically encoded in imperfect and present inflections of the Indicative Mood. Such inflections may combine with verb stems with either perfective or imperfective morphology in some specific syntactic environments: namely, adjunct clauses or *if*-clauses that semantically function as the restrictors of IMPF in constructions with habitual interpretations. When imperfect and present inflections combine with perfective stems in those environments, each piece of morphology makes an independent contribution to the meaning of the construction, so neither is semantically vacuous. Furthermore, the two different layers of overt aspectual morphology are hierarchically organized: the inflections standing for the IMPF operator, which in habitals are indicative of iterativity, always scope over the perfective morphology of the verb stem, which roughly speaking indicates ‘completion’.

Bulgarian imperfect constructions share some readings with morphologically imperfective constructions in other Slavic languages and the Romance languages. Shared readings are of the type we dubbed habitual in section 2, ongoing in section 3, and conative in section 4.3, which falls under the so-called ‘imperfective paradox’ label. Together with these similarities, we showed that there are considerable differences in the meaning of imperfective constructions when contrasting Bulgarian with other Slavic languages on the one hand, and with members of the Romance family on the other. On the Slavic side, Bulgarian contrasts with Russian and Polish, as it lacks the types of past imperfectives with completion readings discussed in detail in section 3, which are dubbed ‘Factuals’ in the recent literature. On the Romance side, Bulgarian is similar to the languages of this family in so far as it displays the Intentional imperfectives of section 4.2, which seem restricted or absent in other Slavic languages. We nevertheless applied a unified perspective both to the noted similarities and to the contrasts, and proposed to account for them in terms of one unique IMPF quantifier with the same intrinsic invariant semantic core in all instances. We adopted the idea that variation in readings results from restrictions on the domain of quantification of the IMPF operator that are linguistically encoded in different ways, depending on the language.

The Bulgarian evidential verb paradigm or RM in section 5 also proved telling for our general program on IMPF. In contrast with the Indicative mood, IMPF in the RM is encoded in the imperfective morphology of the verb stem/participle (without distinction between imperfect and aorist inflections). However, the imperfective stem morphology of the RM also proves to be a transparent window into the semantics, since IMPF plays the same semantic role as in the indicative mood, thus allowing the whole range of interpretations available to IMPF in the indicative mood to surface under the scope of its Evidential Operator. As a result, verb stems that in the RM are marked with imperfective morphology may receive ongoing, conative, and intentional readings, in addition to habitual readings, which prove particularly interesting given the complexity of their morphological composition. That is, in parallel to indicative verbs, the RM may display complex layers of aspectual morphology in the restrictor clause that encode ‘large’ topic situations in habitual readings. For this, the RM combines in a restrictor clause an imperfective stem with a prefix for an iterative effect in contrast with a perfective stem combined with a prefix for an episodic effect. Likewise, RM forms with imperfective verb stems cannot display readings that are not possible for Bulgarian Imperfects in the Indicative mood, and thus lack interpretations equivalent to those of the Polish and Russian Factual imperfectives in section 3, which depict complete events. The RM also lacks imperfective equivalents for the Romance Narrative Imperfects in section 5, which also depict complete events.

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